



**CITY OF CARPINTERIA  
STORMWATER MANAGEMENT PLAN**

**Department of Public Works  
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**Staff Contact:**  
*Charles W. Ebeling  
Public Works Director  
City of Carpinteria  
(805) 684-5405 ext 402*



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## **ACRONYMS AND ABBREVIATIONS**

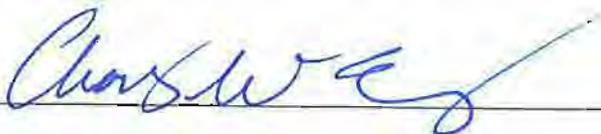
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AB	Assembly Bill
BMP	best management practice
CASQA	California Stormwater Quality Association
CCAMP	Central Coast Ambient Monitoring Program
CCPP	Carpinteria Creeks Preservation Program
CCRWQCB	Central Coast Regional Water Quality Control Board
CCWC	Carpinteria Creek Watershed Coalition
CDS	continuous deflective separation
CEQA	California Environmental Quality Act
City	City of Carpinteria
CSD	Carpinteria Sanitary District
CSFPD	Carpinteria-Summerland Fire Protection District
CSM	Carpinteria Salt Marsh
CWA	Federal Clean Water Act
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
GIS	Geographic Information System
IDDE	Illicit Discharge Detection and Elimination
LCP	Local Coastal Plan
LID	low-impact development
LTER	Long-Term Ecological Research
MCM	minimum control measure
MEP	maximum extent practicable
MS4	separate storm sewer system
NGO	non-governmental organization
NOI	Notice of Intent
NOV	notice of violation
NPDES	National Pollutant Discharge Elimination System

POC	pollutants of concern
POTW	Publicly Owned Treatment Works
RWQCB	Regional Water Quality Control Board
RWRCB	Regional Water Resource Control Board
SBCAMM	Santa Barbara County Association of MS4 Managers
SBFCD	Santa Barbara Flood Control District
SWAMP	Surface Water Ambient Monitoring Program
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	total maximum daily loads

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete.*

*I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*



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Charles W. Ebeling, Public Works Director

## **INTRODUCTION**

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The City of Carpinteria (City) is entrusted by the public with stewardship of the vital environmental resources within its jurisdictional boundaries for the common good. In specific relation to water resources, the City is compelled by the Federal Clean Water Act (CWA) and other enabling state legislation to protect and restore the physical, chemical, and biological integrity of our nation's waterways by controlling and limiting discharges of pollutants to these waterways. The National Pollutant Discharge Elimination System (NPDES) permit program, established by the CWA, controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

In the State of California, the State Water Resources Control Board (SWRCB) and the various Regional Water Resource Control Boards (RWRCBs) implement mandates of the CWA and the NPDES program. There are nine RWRCBs throughout the state, and the Central Coast Region subsumes the entire counties of Santa Cruz, Monterey, San Benito, San Luis Obispo, Santa Barbara and parts of San Mateo, Santa Clara, and Ventura counties. The City is regulated by the Central Coast Regional Water Quality Control Board (Region 3) office, which has its headquarters in San Luis Obispo.

## **BACKGROUND**

The SWRCB has determined that urban runoff is a leading cause of pollution throughout the state and a contributor to pollutants of concern (POC), such as sediments, nutrients, pathogens, hydrocarbons, metals, trash, and pesticides to waterways. Further, the impervious nature (i.e., pavement and hardscape) of most urban communities has resulted in stormwater discharges that have greater volumes, velocity, and pollutant loads than pre-development runoff. Therefore, in compliance with various federal and state requirements, the City as a small municipality and operator of a separate stormwater sewer system (MS4) has prepared a Stormwater Management Program that is contained within this Stormwater Management Plan (SWMP) to guard against detrimental effects on human health and surrounding ecosystems.

The first draft of the City's stormwater quality program was released in January 2002 as part of the Carpinteria Creeks Preservation Program (CCPP) Final Document. The CCPP was prepared as an implementation program to the City's General Plan/Local Coastal Plan to guide the preservation and restoration of creeks located within the City limits. In August 2003, the City's SWMP was revised in response to the SWRCB's final NPDES permit regulations. The subsequent Draft SWMP, dated December 2008, incorporated requirements described in letters from the Regional Water Quality Control Board (RWQCB) dated February 15, 2008 and July 10, 2008, as well as additional information in response to comments received on a previous Draft SWMP from the RWQCB in a letter dated September 17, 2008.

The aforementioned Draft SWMP was prepared by the City and submitted to the RWQCB in December 2008. In response, the RWQCB sent a letter to the City on August 3, 2009 that contained a list of required revisions. Public comment was open on this December 2008 draft from August 3, 2009 to October 2, 2009. The City prepared its own comment to the RWQCB in the form of a revised SWMP dated October 2009. On November 23, 2009, the RWQCB issued an approval letter on the SWMP to the City under a condition of compliance to all required revisions entailed in the body of the RWQCB's August 3, 2009 letter, comments received from the public (namely Santa Barbara Channelkeeper and Heal the Ocean), and additional comments from the RWQCB after release of the August 3, 2009 letter. This SWMP reflects incorporation of all of the aforementioned comments and requirements.

## **PURPOSE**

This SWMP prepared by the City has been composed in compliance with the SWRCB's Water Quality Order 2003-0005-DWQ for Phase II of the NPDES and applicable regulations under the CWA. The goal of this SWMP is to protect the health of the public, the environment, and water quality from the impacts of stormwater runoff. The SWMP outlines a program comprised of guiding principles, strategies and procedures for the protection of water quality and reduction of pollutant discharges to the maximum extent practicable (MEP). This SWMP documents what the City is currently doing to comply with the intent of the NPDES permit and identifies the path forward to expand the program and modify practices based on changes in regulations and/or available information. This SWMP outlines activities to be implemented during the 5-year NPDES permit period beginning December 1, 2009 and terminating in November 30, 2014.

The SWMP is managed by the City's Public Works staff, which is primarily responsible for its implementation. Other local agencies are involved to ensure appropriate implementation of various best management practices (BMPs) (the section titled "SWMP Implementation and Coordination" contains more information on coordination among agencies). This SWMP serves as the structure and guiding document for all entities involved in reducing the discharge of pollutants into the City's creeks and ocean front areas. Additionally, the SWMP is a tool for the public to consult and use as a guide to reduce the discharge of pollutants into the City's receiving water bodies. Thus, the primary objectives of this SWMP are as follows:

- To serve as a planning and guidance document for the City's regulatory bodies, all City department, developers, contractors and the general public
- To creatively, adaptively, and effectively address and manage changes in the General Permit requirements, organizational structure, responsibilities, goals, and strategies
- To precisely define and implement strategies and measurable goals for evaluating BMP effectiveness at reducing pollutant loading (type, amount, and frequency) in the City's receiving bodies

- Define a comprehensive and successful schedule and program for stormwater management in compliance with the requirements of the General Permit.

## **STORMWATER MANAGEMENT PLAN REGULATORY BASIS AND APPLICABILITY**

The Storm Water Phase II Final Rule requires the operator of a regulated small municipal MS4 to obtain NPDES permit coverage because discharges of stormwater from such systems are considered “point sources” of potential pollution. MS4s are considered publicly owned or operated point sources because they collect stormwater and direct it into discrete conveyances, including roads with drainage systems and municipal streets.

According to 40 CFR 122.26(b)(8), “municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created to or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.
- Designed or used for collecting or conveying stormwater;
- Which is not a combined sewer; and
- Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

### **Requirements for Regulated Small Municipal Separate Storm Sewer System**

The owner or operator of a Phase II regulated small MS4, is required to submit a Notice of Intent (NOI) and an SWMP to obtain coverage under an NPDES stormwater permit. The SWMP must describe how pollutants in stormwater runoff will be minimized based on selected BMPs that address the six “minimum control measures” (MCMs). The intent of the SWMP is to achieve the following goals:

- Reduce the discharge of pollutants to the MEP
- Protect water quality
- Satisfy the appropriate water quality requirements of the CWA.

The M:IP is a standard introduced by the U.S. Environmental Protection Agency (EPA) that establishes the level of pollutant reductions that MS4 operators must achieve through

implementation of a stormwater management program. MEP is generally a result of emphasizing pollution prevention and source control BMPs in combination with treatment methods where appropriate. Each permittee, such as the City, will determine what the MEP is for their program based on City-specific factors such as available program funding and technical feasibility.

## SWMP

The City has developed this SWMP in order to achieve MEP standards. This process has included the thorough identification, selection, and implementation of BMPs as described herein. The City has relied on input from the community and various stakeholders, BMP fact sheets, the Central Coast Regional Water Quality Control Board (CCRWQCB), and applicable EPA websites and manuals, as well as considering the budget constraints and needs of the community. In general, the SWMP is applicable within the City's incorporation boundaries; however, there are various BMPs that commit the City to forging more working relationships and alliances with neighboring MS4s and other implementers of SWMPs for the reduction of pollutants in areas where there has been a specifically identified need or where an area of inter-jurisdictional interface has been identified. In such cases, the City has pledged to work with appropriate regulatory entities (i.e., the County of Santa Barbara) to target and reduce pollutants in receiving water bodies.

A stormwater management program for a small MS4 is defined by the Phase II permit as a program composed of six elements that, when implemented together, are expected to reduce pollutants discharged into receiving water bodies to the MEP. These six program elements, or MCMs, are listed below:

- Public Education and Outreach on Stormwater Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations.

The implementation and evaluation of these six MCMs comprise the foundation of the SWMP. As many diverse factors can dictate the specifics of a stormwater management program, the City will regularly evaluate both current conditions and BMP effectiveness and, as appropriate, update BMPs and measurable goals to achieve the objective of reducing the discharge of stormwater pollutants to the MEP. It may be necessary to expand or better tailor existing BMPs after implementing the MCMs described in this SWMP. Such changes would be based on the results of monitoring programs contained in the annual reports and developed in consultation with community non-governmental organizations (NGOs) (i.e., Carpinteria Creek Committee,

Carpinteria Creek Watershed Coalition (CCWC), Channelkeeper, Heal the Ocean), and CCRWQCB.

So as to ensure overarching programmatic effectiveness, the City will develop an effectiveness assessment strategy during the first full implementation year and will submit it as an update to the SWMP with the first annual report (see Table 1). The effectiveness assessment strategy will be used to conduct effectiveness assessments included in the annual reports, starting with the second annual report. Overall, the strategy will describe the actions that will be taken to assess the effectiveness of the SWMP in meeting regulatory requirements and improving water quality and beneficial use conditions. The strategy will specifically address the following: identification of processes to be used to conduct effectiveness assessments and improve BMP implementation; identification of quantifiable BMP and program effectiveness measurements; establishment of links between BMP implementation and improvement in water quality and beneficial use conditions; and assessment of BMP implementation in terms of regulatory compliance, changing awareness, changing behavior, pollutant load reductions, and runoff and receiving water quality.

**Table 1**  
**Stormwater Management Plan Effectiveness**

BMP No.	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
					1	2	3	4	5	
BMP SWMP E-1	Development and Annual Implementation of and "effectiveness assessment strategy"	To accurately assess BMP and program effectiveness so that the SWMP evolves and improves over the permit term.	a) Identify and implement a tool for accurate assessment of program effectiveness in achieving permit requirements and measurable goals.	a) Number of permit requirements met and number of measurable goals met.	1	2	3	4	5	Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH
			b) Identify and implement accurate assessment of program effectiveness in protecting and restoring water quality and beneficial uses.	b) Percentage increase in water quality and beneficial uses.	1	2	3	4	5	
			c) Identification and implementation of quantifiable effectiveness measurement tool for each BMP and linkage with improvement of water quality.	c) Number or successfully ameliorate identified POC(s) in a water body.	1	2	3	4	5	
			d) Identify and implement tool for accurate assessment of BMP implementation to change behavior.	d) Number or percentage of behaviors changed.	1	2	3	4	5	
			e) The City will assess SWMP effectiveness and revise and update as necessary.	e) Number of revisions/updates to SWMP and nature of revisions/updates.	1	2	3	4	5	

## Notice of Intent

The City filed an NOI to apply for coverage under the State of California General Permit. As required, the NOI and this SWMP contained the following information:

- The area covered by the SWMP
- BMPs for each of the six MCMs
- Measurable goals for each of the BMPs (i.e., narrative or numeric standards used to gauge program effectiveness)
- A timeline for implementation of each measure (estimated months and years to implement each measure, including interim milestones and frequency of measurement)
- Individual(s) or group(s) responsible for implementing or coordinating the stormwater program.

Each of these topics is discussed in the following SWMP. BMPs and their implementation are discussed under the appropriate MCM section. Because significant overlap exists between MCM efforts, some sections contain cross-references to other sections in order to avoid redundancy.

## Total Maximum Daily Loads

Total maximum daily loads (TMDLs) establish numeric thresholds for water pollutants and assign proportional responsibility for controlling the pollutants. Consistent with the requirements of CWA Section 303(d), the CCRWQCB identifies impaired waters and prepares TMDLs for impaired waters within its jurisdiction. As defined by CWA, impaired waters are those that do not meet water quality objectives established by the federal and state governments, including those in the local Water Quality Control Plan. Carpinteria Creek and Carpinteria Salt Marsh have been designated as impaired based on monitoring studies conducted by the State Mussel Watch Program and the County of Santa Barbara, a number of other studies that have been completed, and general knowledge of local conditions.

Per the requirements of CWA Section 303(d), TMDLs must be prepared and implemented for all impaired waters within 8–13 years of their initial listing. Many of the high-priority water bodies identified by the CCRWQCB have been addressed. Carpinteria Creek and Carpinteria Salt Marsh are among the priority water bodies on the state list, and resolution of their impairments (see Table 2) commenced in 2006 and will be completed by 2011. While neither Santa Monica Creek nor Franklin Creek are listed by name, these are the primary watersheds supplying freshwater into the Carpinteria Salt Marsh; therefore, corrective actions will take place along these creeks as well. At the time of this printing, the TMDL statuses were not yet finalized; thus, this SWMP will be revised after TMDL process is complete.

## STORMWATER MANAGEMENT PLAN IMPLEMENTATION AND COORDINATION

As indicated previously, SWMP implementation in the City of Carpinteria will primarily be the responsibility of the Department of Public Works, specifically, the Public Works Director. The City's Director will draw upon staff from both the Public Works Department and the Community Development Department to implement different aspects of the SWMP. The City also maintains a number of contractors and consultants who will be responsible for implementing various aspects as well.

SWMP activities will be funded through various general mechanisms including the following:

- Development impact fees
- Measure "D" revenue
- Measure "A" revenue
- Grants
- General fund
- Gas taxes
- Assessment District (right-of-way).

The Public Works Director will implement this SWMP through the BMPs described herein. In addition, the SWMP will be implemented in coordination with CCPP. The intent of the CCPP overlaps with the intent of the stormwater management program. These two programs will be administered by the City in consideration of each other to prevent overlapping efforts and to share information and resources.

The CCPP Final Document was prepared as an implementation tool to the City of Carpinteria General Plan/Local Coastal Plan to guide the preservation and restoration of creeks located within the City of Carpinteria, which is entirely within the Coastal Zone. The program was developed by the City to characterize local creeks and provide the detailed regulations needed to ensure the protection and restoration of local creeks and the City's compliance with regulatory requirements, including those related to the CWA Federal Endangered Species Act, California Porter Cologne Water Act, California Fish and Game Code, and the California Environmental Quality Act (CEQA).

The CCPP goals are as follows:

1. To preserve, restore, and enhance local creek and riparian ecosystems, including geomorphology, hydrology, water quality, and biological communities. This will ensure the preservation and enhancement of beneficial uses of local creeks, transport,

## **OVERVIEW OF THE CITY OF CARPINTERIA**

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The City of Carpinteria, which has a population of approximately 15,000 inhabitants, is located in coastal Santa Barbara County, approximately 10 miles southeast of the City of Santa Barbara and 16 miles northwest of the City of Ventura (Figure 1).

### **GEOGRAPHIC SETTING**

Carpinteria is located in the western portion of the Transverse Ranges geomorphic province of Southern California. The Transverse Ranges province is oriented in a general east-west direction, which is transverse to the general north-northwest structural trend of the remainder of California's coastal mountain ranges. The Transverse Ranges province extends from the San Bernardino Mountains in Riverside County (east) to Point Arguello (west). The province is bounded to the north by the San Andreas and Santa Ynez faults, the east by the Mojave geomorphic province, the south by the Peninsular geomorphic province and Pacific Ocean, and the west by the Pacific Ocean.

The lower watersheds of local creeks include portions of the Carpinteria Basin and adjacent coastal lowlands. The Carpinteria Basin covers an area of approximately 12 square miles. The basin is bordered to the north by the Santa Ynez Mountains and the south by the east-west trending Carpinteria Fault (see Figures 2 and 3). The basin extends from near Highway 150 and Rincon Creek (east) to offshore of Summerland (west). The Carpinteria Basin is a syncline, a basin-like formation of sedimentary bedrock that has been filled over time by marine and non-marine alluvial sediments. The basin was formed during the Pleistocene, or within the last 2 million years, which is relatively recent in geologic time.

### **DRAINAGE CHARACTERISTICS**

In general, creeks in the local area drain small, steep watersheds that originate in the Santa Ynez Mountains and continue through foothills and coastal terrace areas before emptying into the ocean (see Figure 1). Before reaching the ocean, the flows of some creeks pass through wetlands, such as the Carpinteria Salt Marsh (El Estero). Flow levels in local creeks exhibit a high degree of variability through time due to a combination of factors. These include the small size and steep gradient of local watersheds and the highly seasonal pattern of rainfall that occurs in the local area and throughout Southern California as a whole. High creek flows occur during and immediately after heavy rainfall events, which occur almost exclusively between November and April in the local area. Generally, low surface flows or dry conditions exist between rainy periods. Some local creeks are also fed by mountain springs, seeps, and groundwater, and maintain perennial (year-round) flow. Perennial creek sections are usually in the mountains and foothills, where seeps and springs are typically located. Lowland creeks and higher elevation creeks without substantial inputs from springs, seeps, and groundwater typically have intermittent (i.e., seasonal) flow.

The City drains to four main creeks including Carpinteria Creek, Franklin Creek, Santa Monica Creek, and Lagunitas Creek. The general characteristics of each watershed are described below.

**Carpinteria Creek** drains a watershed of approximately 15.0 square miles (approximately 9,600 acres). The Carpinteria Creek watershed is delineated in Figure 2. The main channel of Carpinteria Creek has two major tributaries: upper Carpinteria Creek and Gobernador Creek. The confluence of these tributaries is just upstream (north) of Foothill Road (see Figure 2). The upper Carpinteria Creek watershed includes upper Carpinteria Creek and Sutton Canyon Creek. The Gobernador Creek watershed includes El Dorado Creek and Steer Creek. The Carpinteria Creek watershed reaches a peak elevation of approximately 4,690 feet. Headwater tributaries drain steep hillsides and canyons of the Santa Ynez Mountains. In the foothills and coastal plain, Carpinteria Creek passes through agricultural and urban areas. The creek passes under bridge crossings at U.S. 101 and Carpinteria Avenue, and it continues south between the Concha Loma residential tract to the east and downtown area to the west. Farther downstream, the creek passes under the Union Pacific Railroad bridge and empties into the ocean at Carpinteria State Beach.

The lower portion of the Carpinteria Creek watershed includes foothills and coastal terrace areas of the Carpinteria Basin. Much of the lower watershed has been converted to agriculture (orchards, row crops) and urban uses. Geologic formations in the lower watershed are shown in Figure 3, and include Older Alluvium (Qoa, Qog) in the gently sloping foothills and Recent Alluvium (Qa) in the coastal lowlands (Dibblee 1986 and 1987). Topsoils within the lower watershed are shown in Figure 4 and include the following: Orthents, 50% to 75% slope (OAG), Milpitas stony fine sandy loam, 15% to 30% slopes (MdE), Elder sandy loam, 2% to 9% slopes (Eb), Todos clay loam, 9% to 15% slopes (TbE2), LcG, TdF2, Milpitas-Positas fine sandy loams, 15% to 30% slopes (McF2), Milpitas-Positas fine sandy loams, 2% to 9% slopes (MeC), Goleta fine sandy loam, 0% to 2% slopes (GcA), Metz loamy sand (Mc), Milpitas-Positas fine sandy loams, 30% to 50% eroded slopes (McF2), Milpitas-Positas fine sandy loams, 9% to 15% eroded slopes (MeD2), Camarillo Variant, fine sandy loam (Cb), Goleta loam, 0% to 2% slopes (GdA), and Aquents, fill areas (AC) (USDA 1981).



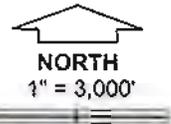


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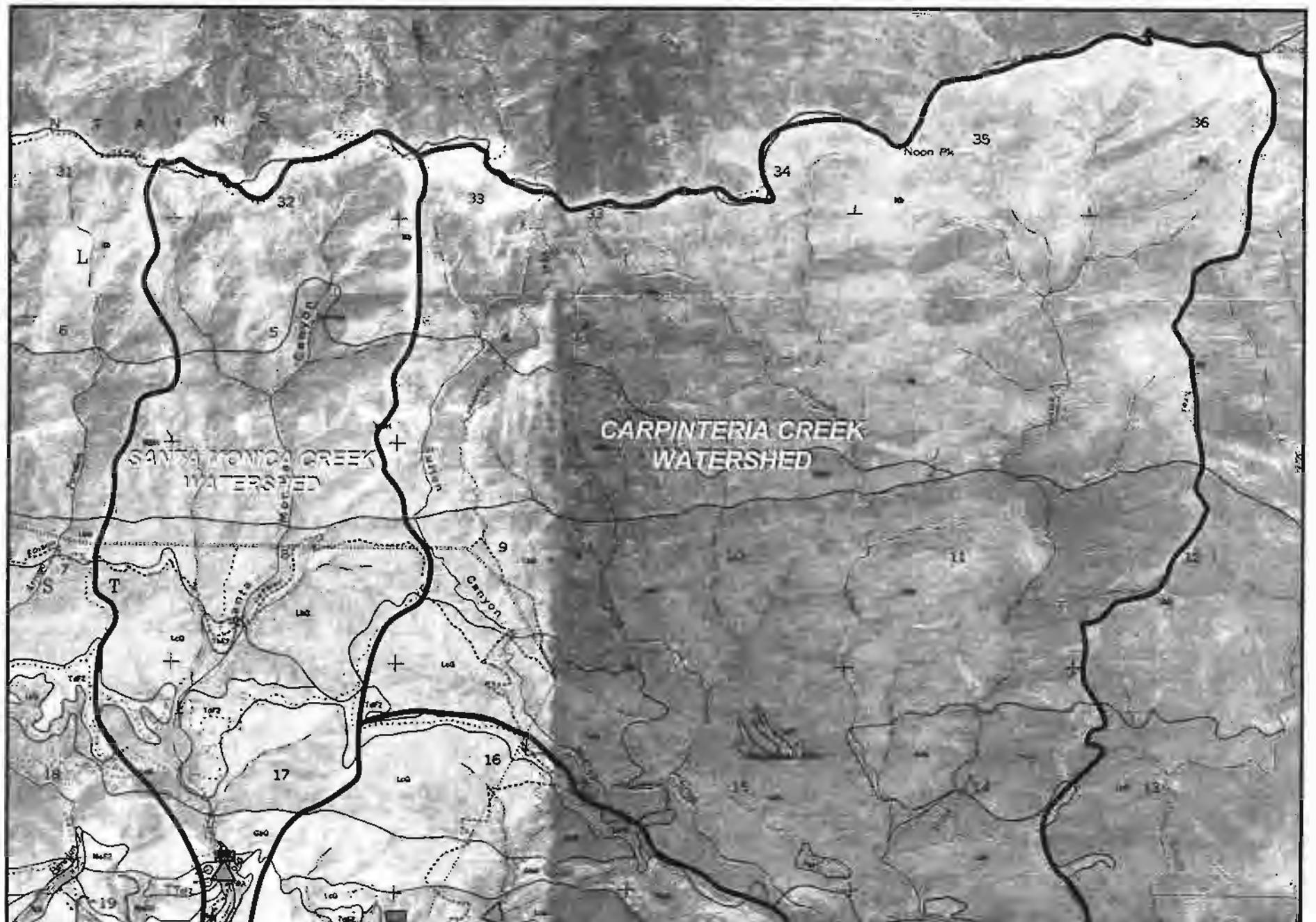


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Creeks in the Carpinteria Creek watershed generally have natural beds and banks along their length. However, creek channelization has occurred, primarily in the coastal lowlands. Alterations to the creek bed and banks of lower Carpinteria Creek have been carried out with the primary intention of protecting developed areas, roads, bridges, etc. that encroach upon the creek from flooding, bank erosion, and related hazards. Major flood control facilities in the Carpinteria Creek watershed are shown in Figure 2. There is a large detention basin on Gobernador Creek, approximately 1.5 miles upstream the Gobernador Creek/upper Carpinteria Creek confluence. This basin fills with sediments naturally over the course of several years because of high sediment yields from the steep coastal mountains and is regularly re-excavated and maintained by the Flood Control District. There is a grade stabilizer along upper Carpinteria Creek approximately 1.5 miles upstream of the confluence. Other creek modifications include bank protection structures (pipe and wire revetment, riprap), at-grade concrete road crossings (summer crossings), and roadway bridges. Some sections of Carpinteria Creek in the coastal lowlands have been straightened. In addition, the Flood Control District regularly conducts minor grading and shaping of the bed and banks of lower Carpinteria Creek to protect development from flooding and bank erosion.

**Franklin Creek** drains a watershed of approximately 5.0 square miles (3,200 acres) and reaches a peak elevation of 1,746 feet. Major tributaries to the main channel of Franklin Creek include the East Branch, West Branch, and High School Creek. The Franklin Creek watershed is outlined on Figure 2. Through the mountains, the tributaries flow through relatively undisturbed National Forest lands. Through the foothills and coastal terrace, the tributaries and main channel of Franklin Creek are flanked by agricultural and urban areas. Franklin Creek empties into the 230-acre Carpinteria Salt Marsh (El Estero), an important coastal wetland.

The main channels of Franklin Creek and its tributaries have been channelized in the coastal lowlands. Major flood control facilities are shown in Figure 2. A detention basin has been constructed along the West Branch, in the foothills approximately 1 mile upstream of Foothill Road. Grade stabilizers have been constructed along four tributary creeks in the foothills, including the East Branch. The creek channels have been converted to open, straight, concrete box channels from the base of the foothills downstream through the coastal terrace (see Figure 5). This project was undertaken in the late 1960s and early to mid 1970s by the United States Soil Conservation Service, Santa Barbara County Flood Control District, and the City. The project was initiated after a series of flooding events occurred along Franklin and Santa Monica creeks in the 1960s and caused damage to adjacent developments.

**Santa Monica Creek** drains a watershed of approximately 3.8 square miles (approximately 2,400 acres) with a peak elevation of 3,835 feet. The main channel of Santa Monica Creek has several unnamed tributaries. The watershed of Santa Monica Creek is outlined on Figure 2. Through the mountains, the tributaries and main channel flow through relatively

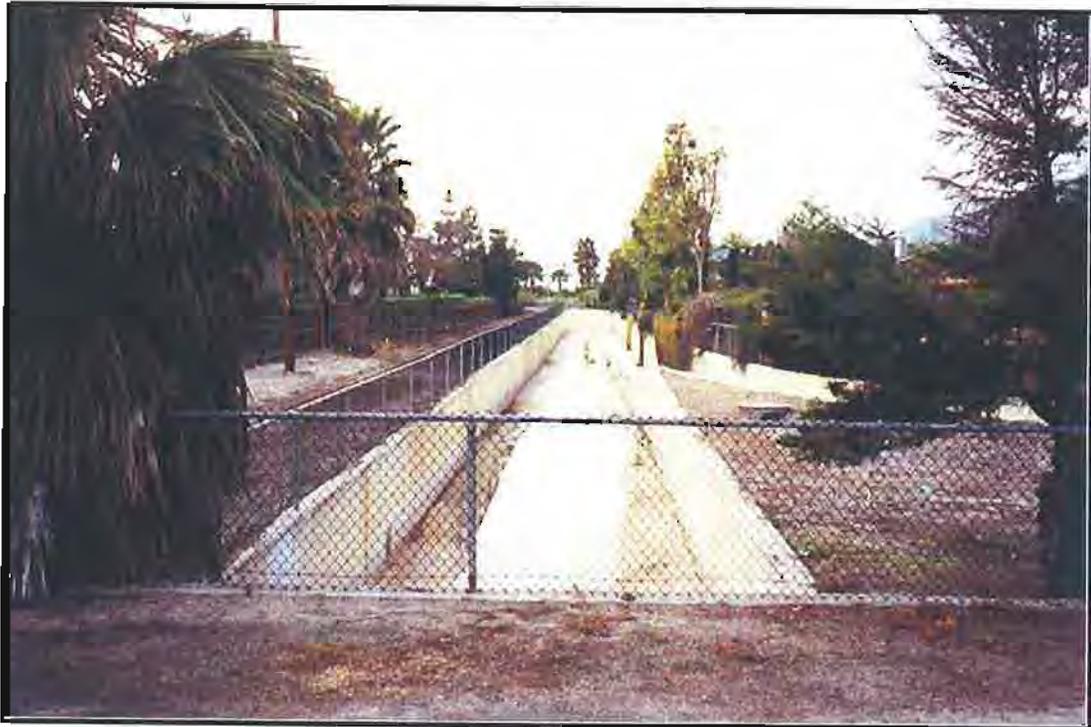
undisturbed National Forest lands. Through the foothills and coastal terrace, Santa Monica Creek is flanked by agricultural and urban areas. Like Franklin Creek, Santa Monica Creek empties into the Carpinteria Salt Marsh.

Creek flow in Santa Monica Creek is dominated by stormwater inputs in the rainy season. The steep headwater section of the creek is also fed by at least two springs (Guptill 1988). There are usually year-round low flows in the concrete channel section of the creek (lower watershed) due to return flows from adjacent urban and agricultural areas.

Like Franklin Creek, the main channel of Santa Monica Creek has been channelized. Major flood control facilities are shown in Figure 2. A detention basin has been constructed along the creek near the base of the foothills. Downstream of the detention basin, the creek has been converted to an open, straight, concrete box channel.

**Lagunitas Creek** drains a small, approximately 300-acre watershed consisting of coastal terrace and foothills in the southeast portion of the City (see Figure 2). The peak elevation of the watershed occurs at Mark Hill, approximately 243 feet above sea level. As shown in Figure 3, geologic formations in the watershed include Qog in the foothills, and Qoa in the coastal lowlands (Dibblee 1986 and 1987). Topsoils within the watershed are shown in Figure 4 and include MeC, Baywood loamy sand, 2% to 9% slopes (BcC), MeD2, Xerorthents, cut and fill areas (XA), and McE2 (USDA 1981).

North of U.S. 101, this watershed includes agricultural lands, low-density residential, commercial, and industrial areas. These areas are drained by a network of storm drains and earthen ditches, which convey stormwater to a 54-inch reinforced concrete pipe that crosses under U.S. 101 and Carpinteria Avenue. Immediately south of Carpinteria Avenue, the pipe feeds into Lagunitas Creek, an earthen creek channel that winds through Carpinteria Bluffs Area II. At its downstream end, the creek enters a pipe passing underneath the railroad to the coastal bluffs. Flows are discharged from the pipe down the bluff face to the beach and ocean.



Looking west along the Main Channel of Franklin Creek, from near the Foothill Rd. / Linden Ave. intersection. The West Branch of Franklin Creek enters the Main Channel in the mid-ground of the photograph. These formerly natural creeks have been converted to concrete box channels.

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## WATER QUALITY CHARACTERISTICS

In general, local creeks have excellent water quality in their upper reaches within the relatively undeveloped Santa Ynez Mountains. Due to their relatively undisturbed condition and excellent water quality, many local mountain creeks support diverse biological communities and are generally safe for human contact and drinking. Downstream through the foothills and coastal plain, the presence of human development increases, which over the years has impacted water quality.

## POLLUTANTS OF CONCERN

The primary POCs in local creeks are bacteria, nutrients, organics total coliform, nitrates, sodium, trash, pH, and dissolved oxygen. These pollutants have been identified by the SWRCB as causing water quality impairments in creeks that pass through the City. The specific 303(d) listed impairments identified for each water body to which the City discharges stormwater are summarized in Table 2. There are currently no final decisions on TMDLs for receiving waters to which the City discharges; however, Table 2 is based on the approvals made by the CCRWQCB in July 2009.

**Table 2**  
**2006 303(d) Listed Water Bodies and Associated Impairments**

<b>Water body</b>	<b>303(d) Listed Impairments</b>	<b>TMDL Status</b>
Carpinteria Creek	Chlorpyrifos, E. coli, total coliform, low DO, and sodium	Required*
El Estero Marsh	Organics, nutrients, and DO	Required*
Pacific Ocean at Carpinteria State Beach	Enterococcus, fecal, and total coliform	Required*
Franklin Creek	Nitrate, chlorpyrifos, E. coli, fecal coliform, pH, and sodium	Required*

\* Pending approval of the State Water Quality Control Board and based on recommendation of CCRWQCB, July 2009.

Secondary pollutants of concern include oil, grease, pesticides, organic wastes, suspended sediments, and water temperature. In general, the source of pollution in local watersheds is surface water runoff from urban and agricultural areas, most of which are outside and upstream of the City's boundary. Individual septic systems are very few in number but have been identified as contributing nutrients and bacteria in areas that do not have sanitary sewer service.

The City consulted numerous sources including the County of Santa Barbara's Department of Health, Environmental Health Services, the Carpinteria Sanitary District (CSD) (Lawhorn 2009), and the 2003 Questa Report and determined that there are likely eight septic systems within the City. Within the first 2 years of the permit term, in conjunction with various other BMPs, the City will engage in a targeted source identification program that will target this type of contamination source and others, such as nitrates, and make a concerted effort to communicate and collaborate with other jurisdictions (i.e., the County of Santa Barbara,

Department of Environmental Health, and CSD) to address and rectify problematic discharges for elimination of pollutants.

Bacteria levels have become elevated in some local creeks due to local land uses and activities. Fecal coliform bacteria are found in human and animal feces and are of particular concern with respect to health issues. Untreated fecal material could contain strains of fecal coliform bacteria that are pathogenic, as well as viruses such as hepatitis, and could cause infections in animals and humans that engage in contact with the contaminated water. Ocean testing following runoff events has confirmed the presence of these pathogens, resulting in intermittent beach advisories and/or closures.

Nutrient levels in local creeks are usually low in natural conditions where moving water limits algae growth. Increases in nutrient concentrations (primarily due to runoff of fertilizers from agricultural/greenhouse areas) can result in algae blooms, which greatly increase the amount of organic material in the creek that must eventually be decomposed. Decomposing bacteria use up oxygen. Thus, increases in nutrients can result in depressed dissolved oxygen levels. Decreased dissolved oxygen levels can also result from increased inputs of oil, grease, and other organic wastes, which can become trapped in local creeks, where they are decomposed. Decreased oxygen levels can have detrimental effects on aquatic wildlife such as fish, amphibians, and invertebrates.

Sediment yields from the local mountains are naturally high due to the steepness of the terrain and the geologic youth of the mountain chain. Sediment loading along the coastal plain is naturally low; however, urban land uses have contributed to changes in the sediment regime of most local creeks. Increased suspended sediment loads in local creeks can result in adverse changes in creek channel morphology, such as burial of creek bottom features (e.g., gravel, cobble, boulders, and woody debris) that provide habitat for fish, amphibians, and other aquatic organisms. Increased suspended sediment loads also result in detrimental effects to water quality, including increased turbidity, lower dissolved oxygen content, and suspension of organic and inorganic pollutants that become trapped in sediments. These effects harm aquatic organisms due to decreased visibility in the water column, clogging of gills and other organs with sediment particles, asphyxiation, physiological effects from toxins, etc. Physiological impacts to aquatic organisms also result from inputs of pesticides, herbicides, and other toxins.

Elevated water temperatures are another common problem in local creeks. Elevated water temperature primarily results from the loss of riparian vegetation, which provides shade. Dissolved oxygen saturation levels decrease with increased water temperature; thus, elevated water temperatures can impact species such as steelhead and rainbow trout that are sensitive to changes in dissolved oxygen levels. Concrete channels absorb heat and result in higher temperatures during low flows.

# **STORMWATER MANAGEMENT PLAN ELEMENTS**

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## **1.0 PUBLIC EDUCATION AND OUTREACH**

The first of the six MCMs addressed in the SWMP is Public Education and Outreach. The intent of the BMPs contained in this control measure is to increase awareness about stormwater issues and to increase community involvement and support for the SWMP. Through implementation of the BMPs contained in Table PE, community members should have an understanding of the behaviors that decrease stormwater quality, how poor stormwater quality negatively impacts the immediate environment, the larger community environment, and also public health and well-being. The program also underscores the role that each individual, household, and business plays in preventing stormwater from being polluted. BMPs have been developed with the idea in mind that each particular pollutant of concern has a corresponding behavior associated with its discharge and impact on water quality. Thus, by educating the public and specifically targeting sectors of the community, correlating target community with specific pollutants and behavior, there will be a reduction in the incidence type of pollutants in the City's water bodies. BMP interventions are a vehicle for change, better stormwater quality, and better watershed health overall.

Where appropriate, the City has sought out and forged collaborative alliances with the Carpinteria Unified School District (CUSD) and the County of Santa Barbara, as well as other municipal separate storm sewer systems (MS4s) on the South Coast. The intent of these relationships is to provide mutual support in the implementation of BMPs, collaboration, and provision of consistent messages on BMPs and stormwater quality. The City is working with other jurisdictions in geographic areas of interface and regulatory areas of interface for programmatic consistency and continuity for overall watershed health.

### **1.1 Best Management Practices**

#### **1.1.1 Coordination and Development of Stormwater Quality Brochures in English and Spanish**

Each jurisdiction in Santa Barbara County, and especially on the South Coast produces and distributes brochures aimed at increasing stormwater quality. In the interest of providing consistent messages on stormwater management, the measurable goals of this BMP is that in the first year of the City's permit term, the City will meet and coordinate with other MS4s, and the goal is to develop and implement the most relevant and consistent messages on stormwater quality to be used in educational brochures. The brochures will be in both Spanish and English and will focus on the City's POCs, which are primarily pathogens, organics, nutrients, DO, fecal coliform and total coliform, nitrates, horse and pet waste, and trash. Brochures will be developed and targeted toward various communities, including the following: (1) a Home Owner's brochure, which will address the proper disposal of pet waste

(horse and other domestic animals), as well as reduction of pollutants such as pesticides and fertilizers, green waste, vehicular washing water, water conservation, and irrigation water conservation, and it will give the public information on the proper disposal of prescription medications; (2) an Automotive Businesses brochure, which will focus on the proper disposal of batteries, grease/oil, other vehicular fluids, and gray water; and (3) a Restaurant/Hospitality brochure, which will focus on the proper disposal methods for cleaning agents, litter collection and storage, grease, and gray water. The brochures will also highlight the City's hotline and outline the steps anyone should take in the case of a spill. The effectiveness measures of this BMP are the successful development of consistent messages and clear BMP directions on brochures, as well as the actual physical printed brochures for all targeted communities.

### **1.1.2 Distribution of Stormwater Quality Brochures**

In conjunction with PE BMP 1.1.1, the measurable goals for BMP 1.1.2 are that the City will distribute brochures to all targeted communities (residents and businesses) within the City. Beginning in Year 2, 25% of each of the targeted communities (home owners, automotive businesses and restaurant/hospitality) will receive brochures, so that by the end of Year 5, 100% of all communities will have been reached. In addition, the City will annually review and revise the brochures as necessary and document the reviews and revisions. The effectiveness measure of this BMP is the reduction in the type and number of POCs in the City's waterways.

### **1.1.3 Ongoing Availability of Stormwater Quality Brochures**

All brochures that will be distributed to the targeted communities via email will also be available at the City on an on-going basis. The measurable goals for this BMP are: 1) educational brochures will be available at City offices and local libraries, and they will be distributed to local businesses and schools by the end of the second year; 2) brochures will also be handed out at community events throughout the permit term; and 3) brochures will be given to any one who requests them. The effectiveness measure of this BMP is the reduction of POCs in the City's water bodies.

### **1.1.4 Community-Based Social Marketing**

Community-based social marketing is predicated upon research in the social sciences that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level that focus on removing barriers to an activity while simultaneously enhancing the activity's benefits. The techniques of community-based social marketing will be consulted, and every year of the permit term an appropriate technique will be chosen and integrated into the City's Public Education and Outreach Program. The measurable goals associated with this BMP are that 1) in the first year, the City will conduct its initial research

and assessment into the type of techniques that will be most effective for the community and introduce its first technique on the program. 2) In subsequent years of the permit term (Years 2–5) the City will assess/evaluate the previous year’s selected technique; and 3) select and integrate a new technique into to Public Education and Outreach Program if necessary. The effectiveness measures for this BMP are the completion of initial research and (on-going) technique selection, and an increased success in reducing POCs and changing behavior over non-Community Based Social Marketing techniques.

#### **1.1.5 Prioritized Business List and Annual Update**

In order to effectively and efficiently target education and training efforts and eliminate primary POCs from receiving bodies resulting from industries, the City will compile a comprehensive list of registered businesses and prioritize these businesses for educational materials and training. The measurable goal for this BMP is that businesses will be prioritized based on the following: (1) the type of activities they engage in and the likely pollutants they emit, (2) the risk of the pollutants, (3) the proximity of businesses to creeks and the ocean, and (4) previous history of business/industry contamination. The list will be compiled and prioritized by the end of Year 1, and the list will be reviewed and updated annually. The effectiveness measures of this BMP are prioritized list containing 100% of registered businesses in Carpinteria, and the number of businesses added annually licenses.

#### **1.1.6 Development and Implementation of Training Program for Businesses/Industries**

In order to help establish good, working relationships between the City and businesses, the measurable goals of BMP 1.1.6 are that City will develop and implement program for all businesses in the City by the middle of the second permit term year. And, beginning with the highest priority businesses and consistently training (face to face) 25% of the City’s businesses per year, 100% of all businesses/industries in the City will have received industry specific BMP training by the end of the permit term. The effectiveness measures of this BMP are the percentage of businesses trained annually and the reduction in the number, type and incidence of pollutants in creeks.

#### **1.1.7 Alternative Information Sources –Website and Print**

The measurable goals associated with this BMP are that the City will develop and maintain an engaging and interactive website to serve as a hub for all things stormwater related. The website will have a link to the SWMP document, all relevant RWQCB letters, and it will provide information on how to get involved in Stormwater Management in the City. The website will provide links to local NGOs, clean-up events, new information and developments on the SWMP, listing of projects/ events throughout the community aimed at water quality and stormwater management and also an email link for the public to send in

questions or comments. Additionally, the City will draft 3 articles for inclusion into the newsletter “Trash Flash” (distributed by the waste hauling company under contract with the city to all households they serve). The effectiveness measures of this BMP are the number of visits to the website, the number of times updated annually and type of content added, and a reduction in pollutants in creeks and the ocean.

#### **1.1.8 Library of Educational Materials**

The City will maintain a library of materials on stormwater issues, publications, articles, recent studies and educational materials, and will promote the library on the Stormwater Management website. The public will be encouraged to use the City’s materials and also donate relevant materials. The City will seek out new materials on an ongoing basis and will review the library’s materials annually. The City will provide these resources to groups and individuals upon request. The effectiveness measures of this BMP are the percentage of library materials used annually, and the number of community members that submit materials.

#### **1.1.9 Event Participation**

In order to put a face on stormwater and create a dialogue on stormwater quality issues, the measurable goal for BMP 1.1.9 is that the City will participate in at least two events annually and provide educational stormwater quality displays for use at these local events. Displays will address the specific target audience of the event and City staff will be on hand to answer questions and engage with the community. Educational brochures will be available and handed out at events. The effectiveness measures of this BMP are the numbers of people who visit the booth/ table/ display at an event, and types of topics discussed as well as a reduction in pollutants in creeks and ocean.

#### **1.1.10 Educational Program for Elementary School Children**

One of the most effective ways to increase stormwater quality, engender good habits and create stewards of the environment is to educate youth. The measurable goal for BMP 1.1.10 is that the City will develop, implement and annually update a stormwater quality curriculum, which will commence in the first year of the permit term. The educational program will provide water quality education to at least 25% of all school aged children (grades K-6) throughout the permit term annually. The effectiveness measures of this BMP are the administration and assessment of quizzes throughout the program to measure increased awareness and a reduction in the number and types of pollutants in the City’s water bodies.

### **1.1.11 Creek and Tributary Signage**

To create awareness of the various surface water bodies and their locations, the measurable goals for this BMP are that the City will install signs labeling creeks and their tributaries in highly visible locations along said water bodies. The City will inspect 100% of local creeks and tributaries in Year 1 and document whether or not there are signs in highly visible locations. The City will also determine where signs need to be, and beginning in Year 2, the City will install signs on a regular basis so that 100% of those unmarked areas are marked by the end of the first permit term. The effectiveness measure of this BMP in year one is documentation of the number of local creeks without signs, and beginning in year 2, the number of signs installed annually until signs are placed along 100% of all creeks and tributaries by the end of the first permit term.

### **1.1.12 Storm Drain Stencils**

Presently, the City stencils stormdrains and they will continue to stencil the message “Do Not Dump: Drains Directly to Creek/Ocean” at catch basins and along open channels. The measurable goals of this BMP are that the City will inspect 20% of marked storm drain inlets per year and repaint as necessary, and inspect and paint/repaint 100% of storm drain inlets by the end of the permit term. The effectiveness measures for this BMP are the percentage of storm drains checked annually and the percentage of storm drains painted by end of first permit term.

### **1.1.13 Stormwater Hotline**

It is important for the community to know what to do in case of emergencies and for there to be well a centralized community resource that is easily accessible. To that end, the measurable goals of this BMP are that the City will promote the hotline, 805-684-5405 and 911 to report serious issues such as water main breaks, direct dumping to storm drains, and other very dangerous public health emergencies. The City will do this through printed materials and on City’s Stormwater Management website. The City will ensure that 100% of calls received through either 911 or 805-684-5405 that are water main breaks, direct dumping into storm drains and other such public health emergencies are responded to immediately; the City will ensure that other calls are responded to within 24 hours. Further, a checklist will be developed and utilized to ascertain and document the type and location of complaint, date and time of the complaint, the response time on the complaint, resolution and follow-up. The effectiveness measures of this BMP are the abatement and the reduction in the number of complaints and incidents of pollution and the number of callers annually.

#### **1.1.14 Stormwater Database**

In association with BMP 1.1.13, the measurable goal of this BMP is that the City will develop a stormwater database to collect, store, and track calls that come in through 805-684-5405 and 911. The database will be created in Year 1 and reviewed and updated annually. The effectiveness measures of this BMP are the recordation of calls, types of incidents, procedure for follow-up and annual updates to the data base as well as a comparison to previous years to determine trends and track types of patterns of occurrences.

#### **1.1.15 Media Campaign**

The City will develop a long-term public outreach strategy utilizing radio, television and the local weekly paper (the Coastal View), in English and Spanish. The measurable goals of this BMP are that as necessary and appropriate, the City will partner with the County and other South Coast jurisdictions. Each message will target a different community, i.e. residential polluters, industrial polluters, and institutional polluters and each message will inform the targeted community about POCs and appropriate stormwater management BMPs. The messages will be developed by the end of Year 2 and aired at least twice between October and May. The effectiveness measures of this BMP are the number and type of radio ads aired annually and a reduction in POCs in the City's water bodies, especially during the rainy season.

#### **1.1.16 Public Opinion Survey**

The measurable goal of this BMP is that the City will conduct a public survey two times during the permit term to targeted communities (as described in various BMPs) to determine existing level of knowledge at the beginning of the permit term and assess knowledge and behavior change at the end of the 5-year permit term. The effectiveness measures of this BMP are the number of returned surveys received by the City, the documentation of areas where most education is needed to inform future public education and outreach topics and strategies, the percent change in the knowledge and behavioral changes at the end of the first permit term.

### **1.2 Reporting**

The data collected for BMPs will be compiled, reviewed, and summarized in each year's annual report. Significant variance from targets will be assessed and discussed in the annual reports. Progress in implementing goals that have multiyear timelines will be reported annually. Implementation of BMPs will be reviewed annually and fine tuned as needed based on the implementation and outcome of the overall Effectiveness Assessment Strategy. Measurable goals will be adjusted as appropriate, and the basis for any changes will be included in the next annual report.

**Table PE  
Public Education and Outreach**

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern			
PE BMP 1.1.1 Coordination and Development of Stormwater Quality Brochures in English and Spanish	The City will coordinate with other agencies on the content and materials addressing stormwater management.	To reduce the amount and sources of stormwater pollutants by changing behavior.	The City will meet with other agencies to coordinate and formulate consistent messages on BMPs for targeted communities, i.e., Home Owner's brochures, Automotive Businesses brochures and Restaurant/Hospitality brochures	Successful development of consistent messages and clear BMP directions on brochures.	1					Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet waste, horse waste			
			Meetings will occur in the first year of the permit term.	Printed brochures for all targeted communities.	1								
PE BMP 1.1.2 Distribution of Stormwater Quality Brochures	The City will distribute stormwater quality brochures to targeted communities.	To reduce the amount and sources of stormwater pollutants by changing behaviour.	Beginning in Year 2, 25% of each targeted community, (Home Owner's, Automotive Businesses, Restaurant/Hospitality) will receive brochures, so by the end of the first permit term, 100% of all communities will have been reached.  Brochures will be assessed annually and updated as necessary. Changes will be documented.	Reduction in the type and number of POCs in the City's waterways.	2	3	4	5	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet waste, horse waste

Table PE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					2	3	4	5		
PE BMP 1.1.3 On-Going Availability of Stormwater Quality Brochures	Educational brochures will be available on an ongoing basis.	To reduce the amount and sources of stormwater pollutants by changing behaviour.	Brochures will be available at City Hall and distributed to all businesses, schools, and the library by the end of Year 2.	Reduction in the type and number of POCs in the City's waterways.	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet waste, horse waste	
			Brochures will be distributed at all City events throughout the permit term.		2	3	4	5		
			Brochures will be provided to those who ask for them.		2	3	4	5		
PE BMP 1.1.4 Community-Based Social Marketing	The City will utilize community-based social marketing techniques.	To reduce the amount and sources of stormwater pollutants by changing behaviour.	Research Community-Based Social Marketing.	Completion of initial research and (on-going) technique selection.	1				Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet waste, horse waste	
			Annual review of implemented strategies and selection of new strategies as necessary.		1	2	3	4		5
			Implementation of the identified techniques.	Increased success in reducing POCs and changing behavior over non-Community Based Social Marketing techniques.	1	2	3	4		5
			Evaluation of the technique.		1	2	3	4		5

Table PE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
PE BMP 1.1.5 Compile Prioritized Distribution List for the Business/Industrial Community	The City will compile a prioritized list of businesses/industries for targeted educational materials and training.	To best target BMP outreach in the form of educational brochures and training sessions.	The list will be created and prioritized by the end of Year 1.  The list will be updated annually.	Prioritized list containing 100% of registered businesses in Carpinteria.  Number of businesses added annually licenses.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
PE BMP 1.1.6 Develop and Implement a BMP Training Program for Businesses and Industry	The City will develop and implement industry-specific training programs for all businesses/industries starting with the highest priority businesses. (Also see IDDE BMP 3.1.2)	To reduce the amount and sources of pollutants and illicit discharges.	The City will develop a training program by the middle of the second permit term year to target 100% of all businesses and industries, starting with the highest priority businesses in the City by the end of the permit term. 25% of businesses/industries will be trained annually. Training will be face to face.  100% of all businesses/industries will have received targeted BMP training by the end of the first permit term.	Percentage of businesses trained annually.  Reduction in the number, type and incidence of pollutants in creeks.	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash,	

Table PE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
PE BMP 1.1.7 Alternative Information Sources – Website and Print	The City will develop a specific SWMP website and draft articles on current issues in stormwater management	To reduce pollutants in water and to raise stormwater awareness.	The website will be developed by the middle of Year 1.	Number of visits to the website.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
			The website will be updated quarterly to include new information available.	Number of times updated annually and type of content added.	1	2	3	4	5	
			The website will be advertised on in all forms of media employed by the City.	Reduction in pollutants in creeks and the ocean.	1	2	3	4	5	
			Three articles on stormwater issues will be drafted annually for inclusion in "Trash Flash."		1	2	3	4	5	
PE BMP 1.1.8 Library of Educational Materials	The City will maintain a library of materials on stormwater issues.	To provide resources for groups and individuals to use, implement in classrooms, at local schools, any interested party/group.	The library collection will be reviewed annually to ensure up to date materials/ information are available. Usage and topics of most interest will be tracked.	Percentage of library materials used by the public annually.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
			Community members will be encouraged to submit appropriate materials.	Number of community members that submit materials.	1	2	3	4	5	

Table PE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
<b>PE BMP 1.1.9</b> Event Participation	The City will participate in community events and provide educational stormwater quality displays	To reduce the amount and types of pollutant in the City's receiving waters.	The City will participate in and display educational stormwater quality information at two events annually.  Displays will address the specific target audience of the event.	Numbers of people who visit the booth/ table/ display at an event, and types of topics discussed  Reduction in pollutants in creeks and ocean.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
<b>PE BMP 1.1.10</b> Educational Programs for School Children	The City will develop, implement and annually update an educational program for elementary school children.	To reduce pollutants in stormwater runoff and raise awareness.	Create a stormwater quality curriculum and implement within the first year of the permit term.  Provide water quality education to at least 25% of all school aged children (grades K-6) throughout the permit term annually.	Quizzes throughout the program to measure increased awareness  Reduction in the number and types of pollutants	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet waste
<b>PE BMP 1.1.11</b> Creek and Tributary Signage	The City will install signs labelling creeks and their tributaries in highly visible locations along said water bodies.	To raise awareness of local creeks and tributaries.	Inspect 100% of local creeks and tributaries in Year 1 and document whether or not there are signs in highly visible locations; Determine where signs need to be.  Beginning in Year 2, the City will install signs on a regular basis so that 100% of those unmarked areas are marked by the end of the first permit term.	Number of local creeks without signs documented in Year 1  Number of signs placed annually along creeks/ tributaries for 100% by the end of the first permit term.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste

Table PE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
PE BMP 1.1.12 Storm Drain Stencils	The City will continue to stencil the message “Do Not Dump: Drains Directly to Creek/Ocean” at catch basins and along open channels.	To reduce pollutant discharge into storm drains.	Inspect 20% of marked storm drain inlets per year and repaint as necessary.	Percentage of storm drains checked annually.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
			Inspect and paint/repaint 100% of storm drain inlets by the end of the permit term.	Percentage of storm drains painted by end of first permit term.				5		
PE BMP 1.1.13 Stormwater Hotline	The City will promote the hotline, 805-684-5405, and 911 to report serious issues such as water main breaks, direct dumping to storm drains, and other very dangerous public health emergencies.	To increase awareness of the public health issues associated with dumping into storm drains and reduce frequency and occurrence of dumping into storm drains; to reduce the overall occurrence of POCs.	Promote use of 805-684-5405 and 911 through printed materials and on City’s SWMP website.	Abatement and the reduction in the number of complaints and incidents of pollution.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
			The City will ensure that 100% of calls received through either 911 or 805-684-5405 that are water main breaks, direct dumping into storm drains and other such public health emergencies are responded to immediately; the City will ensure that other calls are responded to within 24 hours.	Number of callers annually	1	2	3	4	5	

Table PE (Continued)

BMP#	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					2	3	4	5		
			A checklist will be developed and utilized to ascertain and document the type and location of complaint, date and time of the complaint, the response time on the complaint, resolution and follow-up.							
PE BMP 1.1.14 Stormwater Database	The City will develop a stormwater database to collect, store, and track calls that come in through 805-684-5405 and 911.	To decrease frequency and type of dumping and target outreach and enforcement efforts.	The database will be created in Year 1 and reviewed and updated annually.	Recordation of calls, types of incidents, procedures for follow-up and annual updates to the data base.  Comparison to previous years to determine trends and track types of patterns of occurrences.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
PE BMP 1.1.15 Media Campaign	The City will develop a long-term public outreach strategy utilizing radio and television in English and Spanish. Each message will target a different community, i.e., residential polluters, industrial polluters, and institutional polluters; each message will	To provide a uniform message on the importance of stormwater quality and reduce the amount and sources of stormwater pollutants.	Develop long-term public outreach strategy with, as necessary and appropriate, the County and other South Coast jurisdiction to develop long-term public outreach strategy utilizing radio, television and the Coastal View in English and Spanish and inform them about POCs and stormwater management BMPs.	Number and type of radio ads aired annually; times the ads aired; and a reduction in POCs in the City's water bodies,, especially during the rainy season.	1					Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste

Table PE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years				Pollutants of Concern
					2	3	4	5	
			Implementation of public outreach strategy		2	3	4	5	
<b>PE BMP 1.1.16</b> Public Opinion Survey	The City will conduct a public survey two times during its permit term to targeted communities (as identified throughout various BMPs) to determine existing level of knowledge at the beginning of the permit term and assess knowledge and behaviour change at the end of the 5-year permit term.	To provide a baseline and identify areas where education and outreach efforts need to be focused.	Conduct a survey of a representative sample in the Community in Year 1 to determine a baseline and then conduct a survey in Year 5 to assess effectiveness of implemented SWMP and inform future BMP interventions and strategies.	Number of returned surveys received by the City.  Document areas where most education is needed to inform future public education and outreach topics and strategies  Percent change in the knowledge and behavioural changes at the end of the first permit term.	1			5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste

## **2.0 PUBLIC PARTICIPATION AND INVOLVEMENT**

The Public Works Director of the City of Carpinteria will be responsible for implementing this SWMP element.

The goal of this control measure is to facilitate public participation and involvement in the development, implementation, and periodic review of the SWMP. Public participation and involvement will help to ensure that the SWMP not only complies with regulations, but also that it reflects the values and approaches of the community. The public's interest and ownership of the process and the SWMP will increase the success of BMPs and ultimately lead to better stormwater quality. Further, the benefits include but are not limited to potentially providing the community with more volunteers, improving and increasing public knowledge and understanding of local stormwater issues, and increasing public knowledge, understanding, and interest in larger watershed issues. Facilitating public participation and involvement will be accomplished by implementing the BMPs provided in Table PP. In addition, the narrative below for particular BMPs is intended to serve as background, context, and more complete explanations.

### **2.1 Best Management Practices**

#### **2.1.1 Public Participation through Public Meetings and Workshops**

To ensure that the public has ample and frequent opportunities to comment on the SWMP and developments, and to increase public interest, ownership and responsibility in the SWMP, the City will hold publically noticed workshops and meetings on the SWMP, including revisions to the SWMP, annual reports for the SWMP, and all stormwater related ordinances. The measurable goals of this BMP are specifically that the City will conduct annual publically noticed meetings on the SWMP at City Hall. The meetings will be noticed on the City's SWMP web page as well as in English and Spanish in the local newspaper. The City will solicit public comment at meetings and via mail and email and respond to all comments in writing no later than 30 days after the meeting. One of the measurable goals of this BMP is to increased attendance at public meetings on the SWMP by 5% each year. The effectiveness measures of this BMP are the number of public meetings and/or workshops the City holds a year, the number of participants at meetings and number/types of comments received. In addition, the City will track public comment and the City's responses and will record the number of stakeholders on the City's outreach list and number of annual additions to the stakeholder list. Finally, the City will keep a record of attendance and compare with previous years.

### **2.1.2 Continued Participation in CCWC Monthly Meetings**

The CCWC is a consortium of local landowners, community groups, resource agencies, City departments (namely Public Works, Community Development, and Parks and Recreation), state agencies (i.e., State Parks), educators, and concerned individuals who have joined together to restore and protect the resources of all the watersheds in Carpinteria. Contrary to its name, the CCWC spans all watersheds in the community of Carpinteria and is not focused on any one watershed or water body. In general, activities and work conducted by the CCWC are aimed at restoring desirable steelhead habitat conditions, restoring the Carpinteria Salt Marsh, preserving the Carpinteria Bluffs, and healthy watersheds throughout the community. The CCWC holds monthly meetings to discuss local and regional events, as well as CCWC sponsored projects, which in the past have included habitat restoration, educational signage, and public tours. As mentioned above, the CCWC meetings attract attendees of varying levels of participation from organizations and agencies such as the Santa Barbara County Agricultural Commissioner's Office, California Trout, California Department of Fish and Game, and State Parks, as well as representatives from the various County Boards of Supervisors' offices and the general public. The measurable goals of this BMP are that the City's Public Works Department as the responsible entity for the implementation of the SWMP will continue to participate in CCWC monthly meetings and update the CCWC twice yearly on all associated SWMP topics. The Public Works representative will place relevant and current stormwater related items on the meeting's agendas and conduct at least two yearly updates to the CCWC on new developments with the City's SWMP. The effectiveness measures of this BMP are distribution of a questionnaire to CCWC members and meeting participants at a meeting in February 2010 to assess the awareness of stormwater issues. A similar survey will be administered annually for comparison purposes. Additionally, there will be on-going documentation of the number of meetings and topic discussed in the biannual SWMP updates.

### **2.1.3 Support of Volunteer Groups**

The City has the advantage of being a small and relatively closely knit community. In addition, residents in the City are historically proactive when it comes to community engagement and involvement. There are a number of community organizations and NGOs that directly complement the aims and mandates spelled out in the SWMP. These include Carpinteria Beautiful, Carpinteria Creeks Committee, and South Coast Habitat Restoration. Another organization that subsumes some members of the aforementioned organizations, as well as attracting members from other associations, is the CCWC (discussed above). The City will support the aforementioned groups, and others that advance the goals of stormwater management and awareness. The measurable goals of this BMP are to providing links to NGOs websites (if available) on the City's stormwater webpage and by advertising, community events, and volunteer programs and opportunities. Representatives from

supported organizations will be encouraged to attend CCWC meetings and other relevant meetings. Organizations will be able to promote information about their organizations and publicize special events/activities on the City's SWMP website. The effectiveness measures of this BMP are the inclusion of links of interested organizations on the stormwater management website by the end of Year 1 and the number of people who access the website for information on other groups/activities/events; the City will track all updates.

#### **2.1.4 Continued Participation in SBCAMM (Santa Barbara County Association of MS4 Managers Meetings)**

Since 1998, the City has participated in the Santa Barbara County Association of MS4 Managers (SBCAMM) meetings. SBCAMM meets quarterly and includes both regulators (such as the RWQCB) and regulated entities (such as the City). The City will continue to participate in these meetings. Topics for discussion are suggested by participants and include development and interpretation of non-point source regulations, opportunities for cooperative efforts, emerging technology, and sharing of water quality information. On behalf of the City and other local interests, the county is a member of the California Stormwater Quality Association (CASQA), which facilitates the exchange of information and joint research and efforts among Phase I and Phase II agencies statewide. The City is in regular contact with the county on the contents and information shared at CASQA meetings. CASQA meets on a bimonthly basis.

As a measurable goal, the City will continue its attendance and active participation in SBCAMM quarterly meetings. The effectiveness measures of this BMP are the number of meetings attended by the City and the City's tracking of the topics discussed and areas of coordination with other jurisdictions.

#### **2.1.5 Participation in the TMDL Stakeholders Process**

The City anticipates the development of TMDLs for the water bodies and associated impairments listed on the SWRCB 303(d) list. The listed water bodies that flow through Carpinteria and their impairments are summarized in Table 2. Presently, TMDL status is being finalized. Once TMDL status is finalized, this SWMP will be updated accordingly.

As part of TMDL development, the RWQCB initiates a series of public meetings to get all stakeholders involved in the process. The City is tracking TMDL development and participating in the stakeholder process. As measurable goals of this BMP, the City will continue to participate in the Stakeholder process and report on TMDL status at regular CCWC meetings. In addition, the City will hold at least one (1) public workshop to educate the public on the process and solicit comments. Once it is created, the City will post TMDL status and related information on the Storm Water Management website. The effectiveness measures for this BMP are the number of Stakeholder meetings that the City participates in

and the content of the discussions, the meeting minutes of CCWC meetings at which TMDL status is discussed, the number (if more than 1) of publicly noticed workshops held on the topic, the City's tracking of all public comments and the number of updates on the website pursuant to the TMDL press.

### **2.1.6 Community Clean-Ups**

The City both co-sponsored and participated in Creek Week 2009 which in Carpinteria, included creek and beach clean-up events, presentations on Steelhead trout and tours and a clean-up of the Carpinteria Salt Marsh. The City will continue to participate creek clean ups and the measurable goal of this BMP is that the City will organize two creek clean-up events each year in coordination with Creeks Preservation Program efforts. The creek clean-up events will provide volunteers the opportunity to get out and clear trash and other potential pollutant sources from the local creeks. The City will advertise community clean-up program events by contacting participants in various communitywide NGOs and via the City's SWMP website. The effectiveness measure of this BMP is that the City will document the type of debris collected, location of collection and number of participants at each beach clean-up event.

## **2.2 Reporting**

The data collected for each above BMP will be compiled, reviewed, and reported in annual reports. Significant variance from targets will be assessed using the Effectiveness Assessment Strategy and discussed in annual reports. Measurable goals will be adjusted as appropriate, and the basis for any changes will be included in the next annual report. Feedback from stakeholders and other sources will be used to improve implementation of all six minimum control measures.

**Table PP  
Public Participation**

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
PP BMP 2.1.1 Public Participation through Public Meetings and Workshops	The City will hold publically noticed workshops and meetings on the SWMP, including revisions to the SWMP, annual reports for the SWMP, and all stormwater related ordinances.	To increase public interest, ownership and responsibility in the SWMP and to decrease POCs in the City's receiving waters.	The City will conduct annual publically noticed meetings on the SWMP at City Hall.	Number of public meetings and/or workshops the City holds a year.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
			The meetings will be noticed on the City's SWMP web page as well as in English and Spanish in the local newspaper.	Number of participants at meetings and number/types of comments received	1	2	3	4	5	
			The City will solicit public comment at meetings and via mail and email and respond to all comments in writing no later than 30 days after the meeting.	Tracking public comments and the City's responses.	1	2	3	4	5	
			Increased attendance at public meetings on the SWMP by 5% each year.	Number of stakeholders on City's outreach list and number of annual additions to the stakeholder list.	1	2	3	4	5	
				Recordation of attendance and comparison with previous years.	1	2	3	4	5	

Table PP (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
					1	2	3	4	5	
PP BMP 2.1.2 Participation in CCWC meetings	The City Public Works Department will participate in monthly CCWC meetings and update the CCWC twice yearly on all associated SWMP topics.	To facilitate a greater dialogue on the SWMP and ensure CCWC members understand the SWMP.	The Public Works representative will place relevant and current stormwater related items on the meeting's agendas and conduct at least two annual updates to the CCWC on new developments with the City's SWMP.	A questionnaire will be distributed to CCWC members and meeting participants at meeting in February 2010 to assess the awareness of stormwater issues. A similar survey will be administered annually for comparison purposes.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
				On-going documentation of the number of meetings and topic discussed in the biannual SWMP updates.	1	2	3	4	5	
PP BMP 2.1.3 Support of Volunteer Groups	The City will support volunteer groups and efforts that advance the goals of the SWMP.	To increase public interest and involvement in the SWMP.	The City will include links to community groups' websites on the SWMP page.	Inclusion of links of interested organizations on the stormwater management website by the end of Year 1.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
			The City will provide space on the SWMP webpage for organizations to promote activities and events, like a community activity board or month at a glance.	Number of people who access website for information on other groups/activities/events.  Track updates.	1	2	3	4	5	

Table PP (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern					
					1	2	3	4	5						
PP BMP 2.1.4 Continued Participation in SBCAMM (Santa Barbara County Association of MS4 Managers Meetings)	The City will continue to attend SBCAMM meetings.	Regional coordination on SWMP implementation efforts; Opportunities for sharing resources and information on compliance; Forum for providing consistent messages on stormwater management strategies.	Attendance in and active participation in SBCAMM quarterly meetings.	Number of meetings attended.  Track topics discussed and areas of coordination with other jurisdictions.	1	2	3	4	5	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
PP BMP 2.1.5 Participation in TMDL Stakeholders Process	The City will participate in the TMDL Stakeholders process for all applicable TMDLs.	To provide representation for the City and its watersheds.	Participation in the applicable TMDL Stakeholder meetings.  Hold at least one (1) public workshop to educate the public on the process and solicit comments.  Post information on TMDL on the Stormwater Management website.  Track and report on TMDL status at regular CCWC meetings.	Number of stakeholder meetings participated in by the City and the content of discussions.  Number (if more than 1) of publicly noticed workshops held on the topic and track all public comments.  Number of updates on the website pursuant to the TMDL press.  Meeting minutes of CCWC meetings.	1	2	3	4	5	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste

Table PP (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
					1	2	3	4	5	
PP BMP 2.1.6 Community Clean-ups	The City will organize, advertise and participate in the organization of at least two (2) creeks and/or beach clean up events per year.	To reduce pollutants in stormwater and raise awareness.	Implement at least two (2) public creek and/or beach clean-up events per year.	The City will document the types of debris collected, location of collection, pounds of debris collected and number of participants.						Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste

### **3.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION**

According to the EPA in its NPDES General Permit, an illicit discharge is defined as "...any discharge to a MS4 that is not composed entirely of stormwater and not authorized by an NPDES permit." This includes improperly disposed of materials, such as animal (pet and horse waste) and human wastes, trash, and discharges from various businesses and industries that can enter the stormwater system and cause health and safety concerns, as well as other receiving water impacts. Illicit discharges are a particular concern for the City of Carpinteria because of their tendency to be high in pathogens, which may be indicated by fecal indicator bacteria. Fecal indicator bacteria are POCs for the SWMP as they are included in the existing 303(d) impairments for several of the City's receiving waters. Therefore, all discharge sources must be controlled and illicit discharges prevented and/or censured.

The goal of this control measure is to identify and eliminate sources of illicit discharge and illegal dumping, and all BMPs are aimed at achieving this goal. The BMPs contained in this section will control and eliminate illicit discharges through a comprehensive detection and abatement program which will protect the public health and safety. Prevention will also be enhanced through public education and targeted business/industry education and training (see BMPs in Table PE) on what constitutes illicit discharges, the hazards and consequences of illegal disposal, safe disposal options, and incentives for safe disposal. Legal enforcement procedures will also be applied to deter and prevent illicit discharge recurrence.

- The City will continue to target all identifiable sources of POCs (pathogens, nutrients, trash, sediments, etc.). The Public Works Director of the City of Carpinteria is responsible for implementing this SWMP element.

#### **3.1 Best Management Practices**

##### **3.1.1 Storm Drain Mapping**

In order to understand the extent of the area covered by stormwater collection drains, the stormwater system has been mapped. This information is available in the offices of the Public Works Department, City of Carpinteria (phone 805.684.5405). This information is available in hard copy upon request, and once it is fully developed, the map and corresponding document will be available via the Stormwater Management website.

The measurable goals of this BMP are completion of a storm drain map (already complete) and annual review and update. The effectiveness of this BMP will be measured by the successful update of the storm drain map annually with 100% of newly constructed network drainage ways.

### 3.1.2 Education and Outreach

The most effective action in the elimination and prevention of illicit discharges is the education and cooperation of a concerned public. The efforts for educating the community about controlling illicit discharges are discussed in greater detail in Section 1, and the BMPs in that section will dovetail with the BMPs outlined below:

1. City and County websites
2. Spill complaint hotline
3. Brochures
4. Public events
5. Media campaigns
6. Business/industry training.

In general, illicit discharges occur because of a lack of awareness on the part of the discharger. Often, simply pointing out the error and suggesting BMPs to be used in the future is enough to convince businesses and homeowners to cease discharging or dumping or to eliminate the illegal connection. In most cases, the individual responsible can be motivated to do the right thing and will implement appropriate BMPs.

BMPs in the Public Education and Outreach control measure will apply to this control measure as well. Specifically, BMPs PE 1.1.5–1.1.7 are designed to address illicit discharge detection and elimination and focus on businesses. The City will target potential illicit dischargers, such as restaurants, mobile carpet cleaning companies, greenhouses, and nurseries. The City will document the receipt of distributed materials and also conduct BMP training to all businesses within the City beginning with the highest priority businesses in mid-Year 2 of the permit term and continuing until 100% of businesses/industries are reached by the end of the first permit term. Among other things, the education and outreach program will (1) define illicit discharges, (2) discuss alternatives to illicit discharges, (3) acquaint businesses with the City's inspection program regarding illicit discharges, and (5) educate businesses regarding the City's authority to enforce codes related to illicit discharges and levy fines. The City will conduct a quiz at the end of each training session, recording all results. In combination, the City will also track the successfulness of the training and the number of illicit discharges by industry, and it will compile the results. The City will assemble a database to inform future actions and strategies for businesses.

The Education and Outreach BMP in the Illicit Discharge Detection and Elimination (IDDE) control measure, which targets household IDDE issues, will essentially follow the same format as businesses; however, whereas the business trainings will be obligatory, the household training/informational session will be voluntary. The City will document the receipt of

distributed materials and also conduct at least one (1) training session on appropriate household BMPs in the first permit term. The education and outreach program will (1) define illicit discharges, (2) discuss alternatives to illicit discharges, (3) acquaint residents with the City's inspection program regarding illicit discharges, (4) instruct the attendees on what to do in case of an illicit discharge, (5) educate the attendees on how to properly dispose of pollutants, and (6) educate residents regarding the City's authority to enforce codes related to illicit discharges and levy fines. The City will conduct a quiz at the end of each training session, recording all results. In combination, the City will also track the successfulness of the training and the number of illicit discharges, and it will compile the results. The City will assemble a database to inform future actions and strategies for businesses.

### **3.1.3 Identification and Elimination of Illicit Discharge Sources**

The City's program for identification and elimination of illicit discharge sources is comprised of three parts:

1. Source Identification
2. Spill and Complaint Response
3. Field Investigation and Abatement.

Staff from City Planning, Parks and Recreation, Public Works, and Code Enforcement, along with the Carpinteria-Summerland Fire Protection District (CSFPD), CSD, and Santa Barbara Flood Control District (SBFCD) are all engaged in the identification and elimination of illicit discharge activities. Coordination and collaboration efforts amongst agencies are described in more detail in BMP 3.1.4. The City currently has a system in place to respond to spill complaints on a 24-hour a day, 7-day a week basis. It documents complaints, requires clean-up, follows-up on and documents required actions, and enforces penalties for non-response. The City's Spill and Complaint Response and Field Investigation and Abatement program components are described in more detail within this section below. The City's Source Identification program component is described in BMP 3.1.5.

#### **Spill and Complaint Response**

Spill and complaint response is an integral part of the identification and elimination of illicit discharge sources as it enhances the City's ability to prevent pollution due to illicit discharges, engages people in pollution prevention efforts, and provides an opportunity to educate illicit dischargers and potentially prevent consistent and future polluted discharges.

Presently, spill and complaint calls are received directly from the public, from City staff doing routine field work, from facility managers, and from other agencies. Complaints of illicit discharges or spills from the public are received through the Code Enforcement phone line (805-684-5405) or through the Sheriff's dispatch (911). The City's Code Enforcement division is

comprised of two field crew and one supervisor. During off hours and weekends, calls are routed to the Sheriff's dispatcher, who is instructed to then notify the on-call Public Works Maintenance staff member for response.

Upon receipt, the complaint location, type of spill or discharge, and date and time are recorded into the illicit discharge database for follow-up and tracking purposes. The Public Works Maintenance division, which is comprised of five staff members and one superintendent, is then notified by Code Enforcement or the 911 dispatcher and sent out to the alleged site of the spill or discharge to assess the potential for human health or water quality impacts and determine steps toward cleanup.

Upon notification, Public Works Maintenance staff calls the Fire Department. Depending on the size of the spill, the Fire Department may suggest that the City's Public Works Maintenance field staff contain and clean up the spill or the Fire Department may mobilize its hazardous materials spill response team to go out to the site to clean it up. Both crews are trained in hazardous materials spill response. Upon arrival, the spill is immediately contained and the type and source are investigated. If the spill is found to be within or discharging to a County-owned flood control channel, the Santa Barbara County Flood Control District is notified; similarly, if the spill is found to be within or discharging to a Caltrans-owned street or highway, Caltrans is notified. Additionally, if the spill has already reached a waterway and is expected to ultimately discharge to the ocean, the Coast Guard is notified of the spill as well.

If the person or entity responsible is known, Public Works staff issue a written warning with requirements related to cleanup/response, response schedule/deadline, and strategies for abatement of future occurrences. If the person or entity responsible is not known, Public Works and Fire Department staff may clean up and dispose of the spill accordingly. Typically, first responders contain the spill and prevent spilled substances from entering storm drains by setting up cloth or hay wattle storm drain protection. The spill substances are then absorbed using an absorbing material such as Absorb-All. If the spill material has infiltrated soils or pavement, an assessment is made as to how much of the underlying material should be removed and plans are made to do so to prevent groundwater contamination. Hazardous materials are stored in large storage containers located at the Public Works Maintenance Yard where they are picked up within 72 hours of arrival by private contractors.

Public Works staff follows up on illicit discharges where those responsible are known by visiting the site at the scheduled deadline for response per the written warning to ensure the spill has been properly cleaned up. If the spill has not been properly addressed, Public Works staff with the help of the Fire Department staff clean up the spill, call those responsible, and issue a second written warning and clean-up fee appropriated based on the size of the spill.

All spill complaints received directly from the public, from City staff doing routine field work, from facility managers, and from other agencies are recorded in the City's illicit discharge database. For spills within the City's jurisdiction, Public Works Maintenance staff record information related to the type of spill, location, source, clean-up requirements, and schedule and enforcement actions required. Spill cleanups and penalties are tracked through the database to ensure proper resolution and enforcement. For spills outside of the City's jurisdiction that are received through Code Enforcement or the Sheriff's dispatch, Public Works staff follow up with the agency responsible and record resolution to ensure all recorded cases are ultimately closed with proper cleanup and prevention of future discharges.

The City implements the following escalating enforcement strategy for repeat offenses and/or non-response to the initial written warning:

1. A written warning with abatement procedures and schedule/deadlines, BMPs for prevention of future spills, and notification of the escalating enforcement strategy is issued to the responsible party.
2. A notice of violation (NOV) and fine with minimum daily penalties will be issued to the responsible party.
3. A NOV with associated administrative civil liability penalties or referral to district attorney's office. The responsible party will be notified of the penalties or referral.

The City will re-inspect key abated discharges to eliminate recurrence.

Public Works Maintenance staff are all given 40 hours of training upon hire related to hazardous materials handling and spill response. All Public Works Maintenance staff are given an 8-hour refresher training annually on hazardous materials spill first response procedures.

The measureable goals for this program component are (1) the development of a checklist to guide spill complaint responders in gathering all information necessary for recording in the database; (2) 100% record and resolution of spill complaints received, including those from other agencies within the City; and (3) the review and update, if necessary, of the hazardous spill response program and training during Year 1 of the permit term to address potential discharges to the MS4. Effectiveness will be measured by the number of illicit discharges identified, tracked, and abated per year.

### **Field Investigation and Abatement**

A field investigation and abatement program is implemented to proactively identify potential for illicit discharge and educate potential dischargers of alternatives in substance disposal and penalties for illicit discharge. The City conducts an organized proactive field investigation and abatement program that incorporates visual monitoring, education, and elements of the spill complaint and response program discussed above.

While the City currently implements a field investigation and abatement program, Public Works will improve the program by implementing the following activities, some of which overlap with other related BMPs, as noted.

1. The City will walk all four creek channels running through its jurisdiction annually and take notes on conditions at storm drain outfalls (see BMP 3.1.7). Results of visual creek monitoring will be recorded in the monitoring database.
2. The City will conduct a GIS-based illicit discharge potential assessment on a district basis. Districts with high concentrations of land uses/businesses with the potential to discharge pollutants of concern illicitly will be identified (see BMP 3.1.5).
3. The City will review Santa Barbara Flood Control maintenance permits to identify debris/trash hot-spots (see BMP 3.1.4).
4. Based on #1, #2, and #3 above and using the storm drain map developed as part of BMP 3.1.1, the City will identify the top four sub-catchments (defined as the entire area tributary to an outfall to one of the four main channels within the City) for visual screening (and outreach) each year.
5. The sub-catchments prioritized for screening will be scanned from the car for suspicious conditions and potential for illicit discharges. Upon identification of suspicious conditions, the conditions will be assessed and property owners will be questioned and provided with educational materials developed specifically for their particular industry (see BMP 1.1.1). Upon identification of an illicit discharge, Code Enforcement will be notified and procedures for response and follow-up discussed in the section entitled "Spill and Complaint Response" will be followed.
6. All suspicious conditions and illicit discharges will be noted and recorded/tracked in either the illicit discharge database or monitoring database accordingly.

The measurable goals for this program component are to (1) investigate and abate 100% of illicit discharges identified in the field, (2) prioritize and screen approximately four catchments tributary to the main channels (identified through channel walks), (3) develop a schedule for field investigations, and (4) to follow up on 100% of all illicit discharges identified while in the field. Effectiveness will be measured by the percentage of illicit discharge identified in the field abated, the number of sub-catchments screened per year, and the documentation of a schedule for field investigations

#### **3.1.4 Coordination with Jurisdictional Agencies**

The City will coordinate with agencies such as the SBFCD, CSD, and CSFPD on illicit discharge identification and elimination. Cooperation with other concerned agencies enhances the effectiveness of illicit discharge control. In general, these three agencies have jurisdictional

responsibility for some elements of illicit discharge detection and elimination within the City's boundaries. Jurisdictional overlaps related to illicit discharge elimination and coordination opportunities are described below.

Through these coordination efforts, the City will strive to educate the other agencies on the stormwater management program implemented by the City and the role they play in implementation. At annual coordination meetings, the City will provide each agency representative with educational resources developed under BMPs in Section 1 that focus on their areas of overlapping jurisdiction and information on what procedures to follow if an illicit discharge is identified. These materials will be updated annually.

### **Santa Barbara Flood Control District**

The SBFCD and the City have a joint powers agreement that describes the authority and responsibility of each entity. SBFCD owns, operates, and maintains all creeks and channels that traverse the City. In addition, the SBFCD maintains the sediment basin on Via Real near Cravens Lane. Assistance, such as manpower and equipment, is provided by the City for maintenance needs during severe storm events.

The SBFCD is notified when illicit discharges are within their jurisdiction or when illicit discharges originating in the City flow into their jurisdictional creeks and channels. Additionally, SBFCD conducts maintenance where necessary throughout the City's creeks and channels on an as-needed basis. The SBFCD is required to obtain a permit from the City in order to conduct such maintenance, which provides the City with a mechanism to record and track all maintenance activities. Information on maintenance requirements will be tracked and used to inform the prioritization of field abatement and investigation monitoring and outreach activities.

### **Carpinteria-Summerland Fire Protection District**

The CSFPD is responsible for inspecting sites and monitoring compliance with hazardous materials, best management storage practices, and spill response. Labeling and storage of hazardous material is within the jurisdiction of the CSFPD. For new businesses that use or store hazardous materials, the City solicits input from the CSFPD on conditions of approval related to hazardous materials storage and spill response. These require that a safe storage area for pesticides, herbicides, and fertilizers be designed to contain spills. In addition, a Hazardous Materials Business Plan must be submitted to the CSFPD for review and approval for each business in order to detect potential hazards associated with the chemicals.

In addition, Public Works Maintenance staff always call the CSFPD when responding to spill complaints or illicit discharges, and it accompanies City staff on site visits and assists with spill containment, characterization, and cleanup. The hazardousness of spill material is assessed upon arrival at spill site. If material is determined to be hazardous, CSFPD contains the spill and cleans up hazardous materials using approved methods. Hazardous materials are then brought to

the Public Works Yard for proper temporary storage before being picked up by contractors for disposal.

### **Carpinteria Sanitary District**

The CSD was created in 1928 and serves the City and a portion of the surrounding unincorporated areas within the County. The boundaries of the 2.4 square mile service area extend from Bailard Avenue on the east to State Route 192 (Foothill Road) on the north, to Toro Canyon Creek on the west, and to the Pacific Ocean on the south.

The CSD utilizes a number of new technological tools to facilitate an ongoing maintenance program for its sewer system. This program reduces the potential for domestic and industrial waste to be discharged to creeks, storm drains, and groundwater. CSD also employs procedures designed to discover illicit discharges and illegal connections to the storm sewer system. These include the following:

- **Good Housekeeping.** Good housekeeping and preventative maintenance of facility equipment and machinery to capture and prevent spills and discharges.
- **Smoke testing of the District's sewer system.** Smoke testing is used to detect interconnections and leaks (cross connections) between the sewer system and the storm drain system, groundwater, and creeks. CSD also performs smoke testing to detect illicit storm drain connections to the sewer, including residential rain gutters and other hard-piped connections collecting surface runoff to the sewer. Diverting stormwater discharge away from the sewer prevents sewer overflows to storm drains and creeks in wet weather conditions.
- **Closed Circuit Television (CCTV) Video.** CCTV video of sewer lines is part of its ongoing program to assess the condition of the sewer lines. As part of its maintenance program, CSD can prioritize problem areas and detect and fix leaks, plugs, root balls, oil and grease buildup, and replace aging sewer lines.
- **Geographic Information System (GIS).** CSD has developed a GIS, which is currently in use. CSD is able to closely monitor the sewer system using GIS. The GIS contains data on location, age, size, and construction of the pipelines and is used to create maintenance plans for the 39.5-mile pipeline system to treat problematic areas on a priority basis. Preventative maintenance reduces spills and accidental breaks and thus reduces discharges to the stormwater system.
- **Development of public education programs.** CSD holds classes for young people to teach them about the hazards of illicit discharges and illegal connections.

The measurable goals for this BMP are to coordinate at least one meeting with agencies such as the CSD, SBFGD, and CSFPD annually to identify areas for collaboration or joint efforts and to develop materials, as necessary, and educational resources to provide cooperative agencies with

information on stormwater pollution provisions. The effectiveness of this BMP will be measured by the number of meetings held with identified agencies each year and by the number of illicit discharges detected and abated within the City through the collaboration of multiple agencies.

### 3.1.5 Source Identification Program

As part of the City's Illicit Discharge Identification and Elimination Program, the City will develop a source identification program by the end of the second permit year to identify sources of bacteria and nutrients that enter the City's storm drain system. The City will work with neighboring jurisdictions and other regulatory bodies (i.e., the County and RWQCB) when appropriate to identify pollution sources. The source identification program will be an ongoing program and will consist of various means of source identification. The source identification program will include the following elements, among others:

- **Land-Use-Based GIS Analysis:** The City will utilize GIS to geographically assess the potential for illicit discharges based on land use, business type (based on SIC codes), and downstream dry-weather impairments. Land use and specific parcel business license information will be analyzed within the context of known dry-weather impairments, including bacteria, nutrients, and organics, as well as the potential to contribute to impairment through illicit discharges. Those particular businesses with known waste byproducts associated with related impairments will be identified and used to prioritize sub-catchments for IDDE efforts related to education and outreach and routine dry-weather storm drain inspections and visual monitoring. More specifically, this exercise will provide a way to prioritize distribution lists in implementation of BMPs 1.1.2 and 1.1.5, as well as a way to prioritize (in addition to outfall conditions noted during creek walks) visual dry-weather monitoring and facility inspections (BMPs 3.1.7 and 3.1.3) and the subsequent steps involved in the evaluation of the potential for exempt non-stormwater discharges to contribute to stormwater pollution. This will be conducted within the first year of the permit term.
- **Exempt Non-Stormwater Discharge Potential:** The exempt non-stormwater discharges listed in the General Permit include water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, and dechlorinated swimming pool discharges. The City will evaluate based on the land-use-based GIS analysis which of these exempt non-stormwater discharges potentially occur within the City and furthermore which are more likely to be sources of bacteria and nutrient pollution in the creeks. This evaluation will inform the development of new municipal code language as part of the regulatory gaps analysis discussed in BMP 3.1.6. Exempt non-stormwater discharges found to contribute

to bacteria and nutrient pollution will either be prohibited through the development of new municipal code language, or discharges/containment of such will be regulated through control measures added to the municipal code as well. Exempt non-stormwater discharges will be evaluated for their potential to occur within the City within the first year of the permit term. The development of related municipal code language will be according to the schedule cited in BMP 3.1.6.

- **Conduct Visual Monitoring:** As part of the City's illicit discharge field investigation and abatement and monitoring activities, City staff will visually monitor all creek channels annually to look for and record suspicious conditions near storm drain outfalls. If found, suspicious conditions will be investigated by visually monitoring conditions within the specific catchment draining to the outfall of interest (up to four sub-catchments each year). All sources of suspicious conditions, once identified, will be recorded in the monitoring database. Responsible parties will be contacted and provided with focused educational materials.

The City will meet with jurisdictions sharing watersheds with the City at least biannually to discuss strategies, BMPs implemented, and progress made toward the removal of sources of nutrients and bacteria (specifically from greenhouses and equestrian facilities).

The measureable goal for this BMP will be to (1) develop a comprehensive source identification program by the end of Year 2 of the permit term, (2) follow up with 100% of all potential sources of bacteria and nutrients identified each year through the developed program, (3) develop prioritized list of businesses to receive outreach and inspections (4) identify all exempt non-stormwater discharges with the potential to contribute to stormwater pollution, and (5) the development of relevant municipal code language prohibiting all non-stormwater discharges contributing to pollution or requiring BMPs. The effectiveness of this BMP will be measured by successful program development by the end of Year 2, the percentage of identified sources provided with educational materials summarizing targeted stormwater management programs and source controls, the documentation of all exempt non-stormwater discharges likely to contribute to stormwater pollution, and the adoption of new municipal code language related to exempt non-stormwater discharges likely to contribute to stormwater pollution (see BMP 3.1.6)

### **3.1.6 Illicit Discharge and Detection Elimination Ordinance**

As part of an illicit discharge detection and elimination program, it is important to have the support of code language to establish discharger liability and jurisdictional enforceability. Currently, the City regulates illicit discharges related to bacteria/pathogens (pet waste controls), hazardous wastes, oil/grease, other organic pollutants (spill controls/response), and trash (refuse/container controls) based on the City's municipal code language below:

**TITLE 6. ANIMALS****6.04.070 Animal control director – Power to arrest.**

*The animal control director and his or her agents shall have the power to arrest in connection with the enforcement of any of the provisions of this chapter.*

**6.04.240 Dogs on public beach prohibited.**

*It is unlawful for any person to suffer or permit any dog owned, harbored, or controlled by him to be on the public beach between Linden Avenue and Ash Avenue whether leashed or unleashed.*

**6.04.490. Dogs creating nuisance by defecating in public parks, etc.**

*No person owning or having custody or control of any dog shall knowingly or through failure to exercise due care or control permit such dog to defecate and allow such to thereafter remain in any public park, school ground, or other public place, upon the sidewalk or parkway of any street, or upon any private property which is improved or occupied without the consent of the owner or person in lawful occupation thereof. A person shall not be considered in violation of this section if the person has necessary equipment, i.e., shovel, bag, etc., readily available and does take immediate and necessary action to accomplish removal of such nuisance.*

*(Ord. 313, 1981)*

**6.04.390 Equine, bovine, bovidae, suidae, leporidae, and fowl – Permit requirements – Special permit for 4H type projects.**

- A. The keeping or maintaining within the city of any livestock including any live horse, mule or other equine, cow or other bovine, sheep, goat or other bovidae, hog or other suidae, chicken or other fowl, rabbit or other leporidae shall be unlawful without a permit first having been obtained from the city manager or his authorized representative.*
- B. No live horse, mule or other equine, cow or other bovine, sheep, goat or other bovidae, hog or other suidae, chicken or other fowl, rabbit or other leporidae, or other livestock shall be kept in any building used for residential purposes, or in any part thereof, nor shall any such animal be kept or maintained in the city unless there is provided for that purpose a barn, stable, hutch, pen, house or building constructed according to law.*
- C. Equine, bovine, bovidae, or suidae shall be prohibited on any lot of ten thousand square feet or less. On lots greater than ten thousand square feet there shall be a limit of one per lot. No barn, stable, hutch, pen, house or building intended for equine, bovine, bovidae, or suidae shall be erected, constructed, established, altered or enlarged within three hundred feet of any residence, apartment, hotel, motel, school, church, hospital, public building, dwelling or other place of human habitation.*
- D. Fowl or leporidae shall not exceed one per one thousand square feet of lot area, or twenty-four total fowl or leporidae, whichever is the lesser. Fowl or leporidae may be stabled or hatched in a totally covered and enclosed area not less than twenty-five feet from any*

*residence, apartment, hotel, motel, school, church, hospital, public building, dwelling or other place of human habitation. Roosters and peacocks are not permitted within the city.*

- E. The city manager or his authorized representative may issue a special permit allowing one sheep, goat or hog or other suidae that is less than one year old and is part of a controlled, educational animal husbandry project, such as those sponsored by 4H and FFA, to be stabled or hatched in an enclosed area not less than twenty-five feet from any residence, apartment, hotel, motel, school, church, hospital, public building, dwelling or other place of human habitation. This special permit shall not be granted for any horse, mule or other equine, cattle or other bovine.*
- F. A permit shall be applied for to the city manager or his authorized representative in writing and the city manager or his authorized representative shall thereupon cause an investigation to be made. If, after investigating the conditions and considering the facts presented, the following facts are found by the city manager or his authorized representative, a permit shall be issued to such applicant by the city manager or his authorized representative:*
- 1. That the keeping or maintaining of such animal or animals will not constitute a nuisance to the neighborhood;*
  - 2. That the keeping or maintaining of such animal or animals will not constitute a menace to public health;*
  - 3. That the keeping or maintaining of such animal or animals will not constitute an interference with the comfortable enjoyment of life or property;*
  - 4. That the keeping or maintaining of such animal or animals will not be a violation of any state or municipal law or ordinance;*
  - 5. That the keeping or maintaining of such animal or animals will not create a harborage or breeding grounds for insects or vermin.*
- G. If such facts are not found, such permit shall be refused. Permits issued pursuant to this section may be revoked by the city manager or his authorized representative at any time for cause, including, with limitation, failure to maintain the animals in accordance with subdivisions 1 through 5 of subsection F of this section.*

*(Ord. 327 § 1, 1982: Ord. 324 § 1, 1982: Ord. 279 § 1, 1979: prior code § 4431)*

## **TITLE 8. HEALTH AND SAFETY**

### **8.08.180 Spills.**

*Any collector or other person authorized by the city to transport refuse for appropriate disposal shall take all necessary and reasonable steps to ensure that refuse is not scattered or spilled at any point between the place of collection and the place of disposal, and shall clean up any refuse scattered or spilled during collection or transport.*

*(Ord. 474 § 2 (part), 1992)*

**8.08.190 Prohibited acts.**

- A. No person shall place refuse in, or to otherwise use the refuse containers of another person, without the permission of such other person.*
- B. No person other than a responsible party or collector shall remove any refuse from any container, or move the container from the location in which it was placed for storage or collection, without prior written approval of the responsible party.*
- C. No person shall place, keep or bury any refuse, in or under any premises except in containers as provided in this chapter; nor shall any person deposit any refuse in any city sewer or plumbing fixture or pipe connected thereto, except through an approved mechanical device which shreds and grinds refuse.*
- D. No person shall place or permit to be placed in any receptacle or container located in any public place and owned or maintained by the city, any residential or commercial refuse. Such receptacles or containers shall be used only for occasional refuse disposal to avoid the littering of streets and other public places.*

*(Ord. 474 § 2 (part), 1992)*

**8.08.240 Minimum standards for collection vehicles.**

*Any vehicles used for the collection or transportation of refuse shall be leakproof and equipped with a close-fitting cover or other mechanism which shall be affixed in a manner that will prevent spilling, dropping or blowing of any refuse upon the public right-of-way during collection or transportation.*

*(Ord. 474 § 2 (part), 1992)*

**8.08.250 Maintenance of collection vehicles.**

*All vehicles used for collection or transportation of refuse shall be maintained in a clean and sanitary condition, neatly and uniformly painted, shall carry a shovel, broom and fire extinguisher, and shall be washed, cleaned and disinfected both on the inside and outside at least weekly, or more frequently if necessary to protect public health. The outside of all such vehicles shall be kept free from refuse at all times.*

*(Ord. 474 § 2 (part), 1992)*

**8.12.020 Accumulation of fly-breeding material prohibited.**

*No person shall permit the accumulation on premises owned by him or under his control of decaying animal, vegetable, or mineral matter, excreta from domestic animals or fowls, or human excreta, in such a manner as is likely to cause excessive breeding of flies. The term "excessive breeding of flies" means the production of flies in such quantity as may endanger the health or interfere with the comfort of persons who occupy property in the neighborhood.*

*(Prior code § 5400)*

**8.12.040 Accumulation of wet manure – Notice to abate – Time limit.**

*When the health officer is of the opinion that the excessive breeding of flies is caused in whole or in part by the presence of wet manure, he may by such written notice require the same to be abated by the removal or treatment thereof in a manner acceptable to him within thirty-six hours after delivery of such notice.*

*(Prior code § 5402)*

**8.12.050 Neglect or refusal to abate deemed unlawful.**

*It is unlawful for any person to neglect or refuse to abate such condition as described in Sections 8.12.030 and 8.12.040 within the time specified in the written notice.*

*(Ord. 378 § 19 (part), 1985; prior code § 5403)*

**8.12.070 Depositing refuse prohibited – Container requirements.**

*It is unlawful for any person, whether owner, lessee, occupant or agent, to keep in any building, areaway, or upon any premises, alley, street or public place adjacent to any premises; or to dump or place upon any land, or in any water or waterway, any dead animal, butcher's offal, fish or parts of fish, or any waste vegetable matter, ashes, swill or any refuse matter whatever. All refuse matter mentioned in this section must be collected and kept in tightly covered or closed metal cans or vessels, with a tag or label bearing the name of the owner securely attached thereto, plainly designating the premises with which the can or vessel is being or is intended to be used.*

*(Prior code § 5410)*

**8.12.080 Drainage into streets prohibited.**

*It is unlawful for any person, whether owner, occupant, lessee or agent, to permit the discharge from any drain, sink, water closet, privy, washhouse, bathroom, stable, slaughterhouse, sewer or private drain, to connect with or run into or upon any street, alley or park.*

*(Prior code § 5407)*

**8.12.090 Offensive conditions – Nuisances – Notice to abate.**

*It is unlawful for any person to permit any premises belonging to him, or occupied by him, or any cellar, vault, pool, privy, sewer, slaughterhouse or private drain thereon or therein to become nauseous, foul or offensive or prejudicial to public health, and if any person shall have or permit upon any premises owned, occupied or controlled by him any nuisance detrimental to health or any accumulation of filth, garbage, decaying animal or vegetable matter, or any animal or human excrement, or any privy, water closet or cesspool, the contents thereof filling the same to within thirty inches of the ground*

surface, the owner or occupant shall be notified to remove and abate such nuisance within two days.

*(Prior code § 5408)*

**8.54.010 Report of release of hazardous substance.**

- A. *Any person who is reliably informed of, or discovers, a release of a hazardous or extremely hazardous substance, material or waste within the city shall notify the county board of supervisors and county health officer within ten (10) working days after receiving that information or making that discovery, except that if the release poses an immediate hazard to the public health or the environment, the county health officer shall be notified within twenty-four (24) hours. No such report shall be required if there is good cause to believe that such release has already been reported to the county health officer. Such notification shall include, to the extent known, the location of the release, the material released, the date of such release, the persons responsible, and the name of the reporting party. Immediately after notifying the county health officer, such person shall also notify, for informational purposes only, the city manager.*
- B. *For purposes of this section, "hazardous substance," "hazardous material," "hazardous waste," "extremely hazardous substance," "extremely hazardous material," and "extremely hazardous waste" shall have the meanings prescribed in California or federal law governing hazardous substances, hazardous materials, hazardous wastes, extremely hazardous substances, extremely hazardous materials and extremely hazardous wastes.*
- C. *"Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, unless authorized or permitted by law.*

**8.54.020 Injunctive relief and civil penalties.**

- A. *Whenever there is reason to believe that there is a continuing practice by any person in violation of this chapter, the district attorney, county counsel or city attorney may make application to the superior court for an order enjoining such practice, as for an order directing compliance; and upon a showing that such person has engaged in or is about to engage in any such practice, a permanent or temporary injunction, restraining order, or other order may be granted.*
- B. *Any person who willfully violates the provisions of this chapter shall be liable for a civil penalty not to exceed twenty-five thousand dollars for each day that the violation continues to exist. Such civil penalty shall be assessed and recovered in a civil action commenced within one year from the date the failure to report is discovered.*

*(Ord. 403 § 1 (part), 1987; Ord. 390 § 1 (part), 1986)*

**8.55.030 Liability for unauthorized release.**

*If the city takes any corrective action which, in the judgment of the city manager, is reasonably necessary to remedy or prevent an imminent substantial danger to the public health, domestic livestock, wildlife or the environment arising out of any unauthorized release of any hazardous or extremely hazardous material, substance or waste, or if the city is held liable for corrective action by virtue of the city's ownership, leasehold or operator interest in property subject to an unauthorized release, the following described persons shall be jointly and severally liable to the city for its liability or the cost incurred by it in taking any such corrective action:*

- A. The person or persons whose negligent or willful act or omission proximately caused such release;*
- B. The person or persons who owned or had custody or control of the hazardous or extremely hazardous material, substance or waste at the time of such release, without regard to fault or proximate cause;*
- C. The person or persons who owned or had custody or control of the container which held such hazardous or extremely hazardous material, substance or waste at the time or immediately prior to such release, without regard to fault or proximate cause.*

*(Ord. 403 § 2 (part), 1987)*

**8.55.040 Liability for failure to comply with orders.**

*If the city manager issues a lawful order directing any person who has violated or is in violation of any provision of the state laws or city ordinances regulating hazardous or extremely hazardous materials, substances or wastes, to take corrective action respecting such violation, and if such person does not take such corrective action on or before the date specified in the order, the city may take or contract for the taking of such corrective action. If such corrective action is taken by or contracted for by the city, the person to whom the order was directed shall be liable to the city for the cost incurred by it in taking or contracting for such corrective action. If such corrective action is taken by the person to whom the order is directed or by such person's agent, the person to whom the order is directed shall be liable to the city for the city's cost of supervising such corrective action or otherwise verifying compliance with the order.*

*(Ord. 403 § 2 (part), 1987)*

Such existing code language gives the City the authority to regulate discharges of specified origin to the street (curb and gutter system and ultimately to the storm drains), proper disposal of specified wastes, proper handling, notification and disposal of hazardous wastes, cleanup of pet wastes, accrual of wet manure (from pets), and to enforce such regulations with civil penalties or arrest if necessary.

The City will review existing code language related to illicit discharge in conjunction with the review of results from BMP 3.1.5, which will enhance the City's understanding of the potential

sources of illicit discharges. Once potential sources of illicit discharges of pollutants of concern are identified and prioritized, the City will develop municipal code language to adequately address such potential sources of pollution if necessary and revise enforcement procedures if necessary. For example, the City will most likely refine existing municipal code language to specifically address all non-stormwater discharges to the storm drain system (currently, only a specified subset of discharges are prohibited). In addition, the City may wish to develop language to directly address specific conditions related to high-priority sources of POCs that may be called out separately from general language related to “non-stormwater discharges.” Current enforcement procedures noted above in Codes 6.04.070, 8.54.020, 8.55.030, and 8.55.040 serve as examples of the enforcement protocols that may be adopted or enhanced to adequately address illicit discharges.

The Public Works Department staff will take the lead on reviewing and revising the Municipal Code language as necessary to prevent illicit discharges to the maximum extent practicable by the end of Year 3 of the permit term. Revisions to the municipal code are developed through a specified process, which consists of the following steps that serve as the measureable goals for this BMP:

1. Public Works staff will review existing municipal codes related to illicit discharges and identify gaps based on the results of BMP 3.1.5. This will be completed by the end of Year 1 of the permit term.
2. Public Works staff will draft language for additional codes to adequately address gaps in existing municipal code language. This will be completed by the end of Year 1 of the permit term.
3. The City will hold a public meeting to hear the proposed additions to the municipal code. The public hearing will be advertised in the newspaper at least 10 days prior to the scheduled event. This will be completed by the end of Year 2 of the permit term.
4. Public Works staff will receive comments from the City Council based on the Public Hearing and will address such comments in the draft municipal code language. This will be completed by the end of Year 2 of the permit term.
5. Public Works staff will submit revised proposed municipal code language to the City Council, which will be heard at a second public hearing. This will be completed by the end of Year 2 of the permit term.
6. If appropriate, City Council will approve revised proposed municipal code language. This will be completed by the end of Year 2 of the permit term.
7. Code will become effective 30 days after City Council approval.

Once approved, Public Works staff will train City staff on the identification of illicit dischargers per the revised municipal code language. Training of City staff will be completed by the end of Year 3 of the permit term.

### 3.1.7 Monitoring

Stormwater monitoring is an important element of the illicit discharge and detection component of the SWMP because of its importance in providing information to track performance of past efforts and prioritize future efforts. This BMP will be comprised of two elements, which include the following:

#### 1. Visual Monitoring

Public works staff will walk all four channels each year and record conditions in the creek channels and in particular at storm drain outfalls to the channels. Conditions related to foul odors, films, foam, color, algae, trash, and other suspicious conditions will be noted and then digitally recorded in the monitoring database (also referenced in BMPs 3.1.3 and 3.1.5). The results of these creek walks will inform the prioritization of sub-catchments for field investigations for illicit discharge detection, source identification studies, and focused outreach.

The data collected in the monitoring database will be reviewed and summarized for the annual report each year.

#### 2. Tracking Third-Party Stormwater Monitoring Efforts

Public Works staff will coordinate with local monitoring coalitions and track ongoing monitoring efforts for the City's creeks, channels, and beaches by taking the following actions:

- a. Maintaining contact with individuals responsible for third-party monitoring efforts within the City
- b. Developing a database containing all monitoring data available to date (see BMP IDDE 3.1.11)
- c. Keeping track of when and where monitoring events occur
- d. Following up with contacts on results
- e. Updating database with all new monitoring data.

In the past, stormwater runoff monitoring has been conducted throughout watersheds in the City and in receiving watersheds by a number of different programs:

- **Assembly Bill 411 Monitoring:** Assembly Bill (AB) 411 requires the State Department of Public Health to adopt regulations establishing minimum standards for the sanitation of public beaches. The bill requires that the regulations require testing of waters adjacent

to all public beaches. AB 411 monitoring is conducted in Carpinteria by the County of Santa Barbara Environmental Health Services department at two locations: Carpinteria City Beach and Carpinteria State Beach. This monitoring has historically been conducted for total coliform, fecal coliform, and enterococci on a weekly basis; however, due to funding cuts, it is now conducted weekly between April 1 and October 30 each year. Monitoring is ongoing and commenced in 1998.

- **Central Coast Ambient Monitoring Program:** The Surface Water Ambient Monitoring Program (SWAMP) was created to fulfill the state legislature's mandate for a unifying program that would coordinate all water quality monitoring conducted by the state and regional water boards. The Central Coast Ambient Monitoring Program (CCAMP) is the regional organization of the SWAMP. CCAMP monitoring is conducted monthly on an ongoing basis in Carpinteria Creek at Carpinteria Avenue and in Franklin Creek at Carpinteria Avenue starting in 2001. Additionally, CCAMP monitoring was conducted in Carpinteria Creek at Highway 192 monthly between April 2001 and December 2001, Franklin Creek at Mountain View Lane monthly between January 2006 and December 2006, and Santa Monica Creek at Carpinteria Avenue monthly between January 2008 and June 2008. Monitoring is typically conducted for conventional water quality constituents including DO, pH, conductivity, salinity, temperature, turbidity, nitrate as N, nitrite as N, total ammonia as N, total phosphorous as P, orthophosphate as P, total dissolved solids, fixed and volatile dissolved solids, hardness as CaCO<sub>3</sub>, fixed and volatile suspended solids, calcium, magnesium, boron, sodium, chloride, total and fecal coliform, and *E. coli*. Additionally, samples were taken March 25, 2002 and March 31, 2004 from Franklin Creek at Carpinteria Avenue and Carpinteria Creek at Carpinteria Avenue and analyzed for toxicity.
- **Long-Term Ecological Research Monitoring:** The Long-Term Ecological Research (LTER) Network is a collaborative effort involving more than 1,800 scientists and students investigating ecological processes over long temporal and broad spatial scales. The local arm, the Santa Barbara Coastal LTER, has conducted monitoring of within the City of Carpinteria as part of a focused study on the patterns, transport, and processing of organic and inorganic inputs to the coral reefs of the Santa Barbara Channel. LTER efforts have involved water quality monitoring near the greenhouses and nurseries for dissolved inorganic nutrients (nitrate, phosphate, and ammonium), total dissolved nitrogen, particulate nitrogen, phosphorus, carbon, and total suspended solids. Samples are collected during both baseflow and stormflow conditions and are used with discharge data to determine flux rates of stream solutes.
- **Channelkeeper Monitoring:** Santa Barbara Channelkeeper is a non-profit organization committed to monitoring local waterways, restoring aquatic ecosystems, advocating for clean water, enforcing environmental laws, and educating and engaging citizens in identifying and devising solutions to local water pollution problems. Channelkeeper conducts monitoring throughout the Santa Barbara Channel region and in Carpinteria and

has conducted isolated monitoring of nutrient runoff from the greenhouses and nurseries in the northeastern part of the City. Santa Barbara Channelkeeper has recently secured funding for at least 1 year of ambient water quality monitoring at various sites throughout the City's creeks to commence in summer of 2010. The exact monitoring locations have not been determined as of the completion of this document.

- **University of California, Santa Barbara Monitoring:** In collaboration with other researchers from the University of California, Los Angeles and the U.C. Cooperative Extension, the laboratory of Professor Patricia Holden conducted field sampling at the Carpinteria Salt Marsh (CSM) beginning in September 2008 and continuing through June 2009. During each of five events that were timed to enable sampling the incoming and outgoing tidal conditions during a single event, surface waters were sampled from multiple locations extending from the CSM influent near the marsh northern border to the ocean. Each event included sampling West Creek, Estero Creek, and Franklin Creek. Site conditions, including water conductivity and temperature and, where possible, flow characteristics, were measured at the time of sampling. Water samples were analyzed for culturable FIB, DNA-based culture-independent abundances of enterococcus, abundances of a DNA marker for bacteroidales specific to human fecal material, and the presence of nifH, which is a gene marker specific to a methanobrevibacter associated with human fecal material. During one event, water samples were filtered to separate particle-associated from planktonic bacteria, and the FIB associated with each fraction were quantified. As of January 2010, all planned field work was completed and most analyses were performed. Data analysis is ongoing and a report of the results and their interpretation are in preparation but were not available at the time this went to print.

The database will be a central location for all water quality data for water bodies within the City's jurisdiction and will include notes from visual monitoring walks as well. When necessary, the database may be referred to for statistical analysis and to track BMP effectiveness.

The measurable goals for this BMP include the development of the monitoring database, the completion of visual monitoring of all creek channels each year, the record of 100% of future monitoring efforts in creeks within the City's boundaries, and the collection of 100% of the monitoring data available from monitoring coalitions for the City within the first year of the permit term. The City will also update the database in subsequent years with 100% of monitoring results as they become available. Additionally, the City will utilize monitoring data to evaluate program effectiveness, if appropriate. The effectiveness of this BMP will be measured by the successful development and update of the monitoring database, the number of creek channels walked each year, the documentation of follow-up actions taken based on monitoring results, and by the documentation of new data added to the database each year.

### **3.1.8 Illicit Discharge Detection and Elimination Training**

The City will conduct annual training of all IDDE enforcement staff to ensure water quality is protected to the MEP, reduce pollutants in stormwater runoff by enforcing illicit discharge prohibitions, and effectiveness of enforcement staff. Annual training of all enforcement staff and inspectors will include training on IDDE BMP implementation, review of progress on tools used in IDDE (i.e., geographical assessment), review of IDDE ordinance development, review of inspection procedures, review of enforcement mechanisms, and solicitation of feedback from the field staff on how the program could be improved.

The measureable goal of this BMP is the annual training of all enforcement staff and inspectors. The effectiveness of this BMP will be measured by: 1) surveys given to staff to assess effectiveness of trainings before and after training sessions, 2) attendance, and participation at each training session; 3) comments on program effectiveness from Enforcement and Field staff will be compiled; 4) Number of enforcement cases and repeat offenders will be assessed each year and compared with the previous year to determine trends.

### **3.2 Reporting**

The effectiveness of the BMPs implemented for this control measure will be addressed in annual reports using the Effectiveness Assessment Strategy. Documented activities will be described in detail and evaluated with respect to the measureable goals described herein.

**Table IDDE**  
**Illicit Discharge Detection and Elimination**

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
IDDE BMP 3.1.1 Storm Drain System Mapping	A map of the current storm drain system has been developed, will be digitized and made available to the public and will be updated, if necessary, annually.	To reduce source, amount, type and frequency of pollutants by utilizing maps to track types and sources of illicit discharges.	Complete mapping of Storm Drain System.	The number of other BMPs which are facilitated by the accurate mapping of the storm drain system.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos Low DO, Sodium, Organics, pH, trash
			Review and update map annually.	Percentage of new storm drainage ways added to map each year.	1	2	3	4	5	
IDDE BMP 3.1.2 Education and Outreach	Continue to utilize web sites, hotline, brochures, public events, and media campaigns to educate the community and hold an industry and community informational session(s) on specific BMPs.	To reduce the source, amount, types and frequency of pollutants in waters throughout the City by increasing awareness of POC in the City.	Receipt of brochures by 100% of businesses and residents by the end of Year 2.  Face-to-face training of 100% of all businesses by end of permit term.	Percentage of businesses and residents receiving brochures each year.  Percentage of business trained by the end of the permit term.		2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos Low DO, Sodium, Organics, pH, trash
IDDE BMP 3.1.3 Identification and Elimination of Illicit Discharge Sources	Respond to and document all spill complaints and follow-up with all necessary parties on complaints received through Code Enforcement, the water quality hotline, 911 and observations	To reduce the source, amount, types and frequency of pollutants in the City's waters by properly identifying and responding to illicit discharges.	Development of a checklist to guide spill complaint responders.	Checklist development	1					Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos Low DO, Sodium, Organics, pH, trash
			Record and resolution of 100% of all spill complaints received, including those from other jurisdictions.	Percentage of spill complaints recorded and percentage of those recorded resolved.	1	2	3	4	5	
			Review and update of hazardous spill response	Review and update of hazardous spill response	1	2	3	4	5	

Table IDDE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
			<p>program) and training during Year 1 if necessary. Annual training of hazardous spill responders.</p> <p>Investigate and abate 100% of illicit discharges identified in the field.</p> <p>Prioritize and screen four sub-catchments each year.</p> <p>Develop schedule for field investigations.</p> <p>Conduct follow-up inspections and take enforcement measures necessary to ensure abatement.</p>	<p>program. Percentage of Public Works Maintenance staff trained each year.</p> <p>Percentage of illicit discharges identified in the field abated.</p> <p>Number of sub-catchments screened each year; documentation of visual monitoring.</p> <p>Documentation of schedule for field investigation of priority areas.</p> <p>Documentation of follow-up inspections and enforcement measures taken in the illicit discharge database.</p>	1	2	3	4	5	
<b>IDDE</b> <b>BMP 3.1.4</b>	The City will coordinate with agencies such as the Sanitary District, Flood Control District and Fire District as well as the County of Santa Barbara and the CUSD.	To ensure water quality is protected to the MEP and that there are no jurisdictional gaps.	At least 1 meeting with agencies such as the Sanitary District, Flood Control District and Fire District, County and CUSD annually to identify areas for collaboration or joint efforts as well as identification of areas that are being jointly managed.	Number of meetings with the Sanitary District, Flood Control District, Fire District, County, and CUSD; documentation on the content of meeting(s) as well as the outcome(s); number of illicit discharges detected and abated through the collaboration of multiple agencies.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos Low DO, Sodium, Organics, pH, trash

Table IDDE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
			Development as necessary and appropriate, materials on IDDE (please see BMP 1.1.1, BMP 1.1.10 and BMP 2.1.4) for public distribution	Record of the materials developed jointly or shared amongst agencies each year.	1	2	3	4	5	
IDDE BMP 3.1.5 Source Identification Program	The City will develop a source identification program to identify sources of bacteria and nutrients that enter the City's storm drain system. The program will include the following elements, among others: 1. GIS based analysis of land use and business distribution to identify high priority areas for inspection, monitoring and outreach. 2. Evaluation of relevant exempt non-stormwater discharge potential	To identify potential sources of priority pollutants to facilitate focused mitigation efforts.	Develop source identification program by the end of Year 2 of the permit term.	Source Control Program development.	1	2				Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos Low DO, Sodium, Organics, pH, trash
			Follow-up with 100% of potential sources of priority pollutants identified each year.	Percentage of potential sources contracted each year with educational materials/facility inspections.			3	4	5	
			Prioritize businesses for outreach and inspections and sub-catchments for monitoring. Identify all exempt non-stormwater discharges that have the potential to contribute to stormwater pollution.	Prioritized list of businesses and sub-catchment. Record of all exempt non-stormwater discharges that are likely to contribute to stormwater pollution that are not already prohibited by municipal code language.	1		3			

Table IDDE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years				Pollutants of Concern
			Develop relevant municipal code language prohibiting all exempt non-stormwater discharges having potential to contribute to stormwater pollution or requiring BMPs for use.	Adoption of new municipal code language related to exempt non-stormwater discharges.	2				
<b>IDDE</b> <b>BMP 3.1.6</b> Illicit Discharge and Detection Elimination Ordinance	The City will review existing municipal code language related to illicit discharges and identify gaps based on the results of 3.1.5. The City will draft language to adequately address gaps related to illicit discharge prohibition and regulation.	To ensure water quality is protected to the MEP and reduce pollutants in stormwater runoff by enforcing illicit discharge prohibitions.	<p>Conduct review of relevant municipal code language and identify gaps.</p> <p>Draft and adopt language for additional codes to adequately address gaps related to illicit discharges.</p> <p>Hold one public meeting to hear the proposed code additions; advertise meeting in newspaper.</p> <p>Obtain City Council approval of code language.</p> <p>Train City staff on new code language.</p>	<p>Identification of gaps related to illicit discharge.</p> <p>Draft and adopt language by the end of Year 2 of the permit term.</p> <p>Number of people in attendance at public meeting. Record of all comments received and responses.</p> <p>Adoption of new code language related to illicit discharges.</p> <p>Number of City staff trained; record of training materials.</p>	1	2	2	3	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos Low DO, Sodium, Organics, pH, trash

Table IDDE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
IDDE BMP 3.1.7 Monitoring Program	The City will monitor creeks on a quarterly basis	To track ongoing conditions in the creeks.	Development of the monitoring database.	Monitoring database implementation.	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos, Low DO, Sodium, Organics, pH, trash, pet and horse waste
			Visual monitoring of all four creek channels quarterly	Number of creek channels walked quarterly; documentation of water quality	1	2	3	4	5	
			Record 100% of all field notes taken monitoring in database.	Number of outfalls marked for follow-up; record of follow-up actions.	1	2	3	4	5	
			Collect 100% of all third party monitoring results available and compile in database.	Record of new data added each year.	1	2	3	4	5	
			Use monitoring data collected to determine effectiveness of SWMP efforts and to improve Program components.	Documentation of use of monitoring data for effectiveness evaluations.					5	

Table IDDE (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
IDDE BMP 3.1.8 IDDE Training	The City will conduct annual training of all staff involved in Illicit Discharge and Detection Elimination enforcement.	To ensure water quality is protected to the MEP, reduce pollutants in stormwater runoff by enforcing illicit discharge prohibitions and effectiveness of enforcement staff.	Annual training of all enforcement staff and inspectors will include BMP training, latest developments in the City on mapping for IDDE, ordinance development, enforcement tools, latest development in BMPs and to assess from the field staff how the program is working and if there are ways to improve the program.	Surveys will be given to staff to assess effectiveness of trainings before and after training sessions	1	2	3	4	5	Priority pollutants in Carpinteria; Nutrients, Fecal and Total Coliform, Nitrate, Trash, Chlorpyrifos Low DO, Sodium, Organics, pH, trash
				Attendance and participation will be documented at each training session.	1	2	3	4	5	
				Comments on program effectiveness from Enforcement and Field staff will be compiled.	1	2	3	4	5	
				Number of enforcement cases and repeat offenders will be assessed each year and compared with the previous year to determine trends.	1	2	3	4	5	

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## 4.0 CONSTRUCTION SITE RUNOFF CONTROL

The purpose of construction site runoff controls is to prevent soil and construction waste from entering stormwater. During construction projects, ground disturbance activities result in sediment, which is the primary POC. The potential for greater amounts of sediments to be deposited in these short periods is higher than the potential for the same amount of sediments to be deposited in waterways over several decades. In addition to sediment, other pollutants from construction sites such as hydrocarbons, pathogens, etc. also have the potential to physically, biologically, and chemically impact the City's receiving water bodies.

Currently, under state planning law and the CEQA, the City is responsible for evaluating new development and redevelopment projects. The State of California has direct jurisdiction over construction sites of greater than 1 acre. The City also regulates construction sites greater than one acre as well as sites less than one acre that are part of a common plan of development. Construction site erosion and sediment controls are part of the City's municipal code and City staff ensures compliance with the Grading Ordinance and Standard Conditions through site plan reviews. *Chapter 8.36 Excavation and Grading* of the City's municipal code contains relevant grading language, and is cited later in this section. For construction activities that do not require an erosion control plan, City staff provide information on appropriate BMPs for various activities. The City will use the EPA fact sheets for then applicable BMP activity.

Construction site runoff is regulated through processes already in place. City staff requires applicants to demonstrate intended use of sediment and erosion control measures on site plans prior to permit issuance. If the project requires review and approval by a discretionary review body (i.e., project is disturbing 1 acre or more of soil), prior to submitting for a building permit, City staff requires applicants to demonstrate specific measures on the site plans and recommend conditions of approval that bind project applicants to the implementation of the sediment and erosion control measures. After discretionary review approval but before issuance of the applicable permit, City staff review the final project plans to ensure required erosion and sediment control measures are shown.

City staff utilize the permit review process as a vehicle for educating architects, engineers, and contractors on safe stormwater practices. Communication between City staff and the project applicant in regards to safe stormwater practices is continuous from the beginning to the end of the project. City staff review site plans for all projects submitted for a building or public works permit. Upon receipt of the project application, City staff review the application and ensure that erosion and control measures, appropriate to project size as required by the Grading Ordinance and supplemental authorities, are incorporated. A project can fall into one of three size and erosion and sediment control measure categories:

1. Disturbance of less than 30 cubic yards of earth – There are no erosion and sediment control measures required of projects of this size. General BMPs will be recommended to project applicants.
2. Disturbance of greater than 30 cubic yards of earth – An Erosion and Sediment Control Plan is required of projects of this size.
3. Disturbance of 1 acre or more of land – An Erosion and Sediment Control Plan is required of projects of this size. Additionally, these projects will undergo Discretionary Review.

The City is required to reduce pollutants in stormwater runoff from construction sites both greater than one acre and sites less than one acre that are part of a common plan of development. Further compliance with the General Permit requirements minimally necessitates (1) development and implementation of a citywide ordinance or other regulatory mechanism controlling erosion and sediment; (2) citywide requirements for construction site operators to comply with appropriate erosion and sediment BMPs; (3) citywide requirements for construction site operators to recycle and properly dispose of unusable building materials, control truck washout, and control chemicals, as well as to properly handle litter and sanitary wastes on construction sites so that adverse water quality impacts are avoided; (4) citywide procedures be in place and enforced for site plan review, including the incorporation and consideration of potential water quality impacts; (5) citywide procedures be in place for the receipt and consideration of information submitted by the public; and (6) citywide procedures be in place for site inspection and for the enforcement of control measures. To these ends, BMPs outline the strategy that will be employed to effectively control erosion, sediments, and other pollutants from contaminating the City's water bodies, as well as enforcement mechanisms for violations of the City's requirements.

For projects that propose soil disturbance of greater than 1 acre, a Waste Discharge Identification number (WDID) will be required and recorded. In this way, the City verifies that the project applicant is covered under the statewide General Permit for Storm Water Discharges Associated with Construction.

#### **8.36.010 TITLE.**

*The regulations contained in this chapter may be known and referred to as the "excavation and grading code."*

*(Prior code § 4600)*

#### **8.36.020 Purpose.**

*The purpose of this chapter is to establish minimum standards to safeguard life and property, to control erosion and flood damage, and to promote public welfare, by regulating and controlling*

*the design, construction, quality of materials, use, location and maintenance of grading, excavations and fills.*

*(Prior code § 4601)*

**8.36.030 Person defined.**

*The word "person" as used in this chapter means and includes any individual person, firm, corporation, association, partnership, public agency, public district or municipal corporation, but shall not include the county of Santa Barbara, the city, the state of California, or the United States.*

*(Prior code § 4602)*

**8.36.040 Chapter applicability--Exemptions.**

- A. Except as provided in this chapter, these regulations shall apply to all new grading, excavations, fills, borrow pits and borrow areas, and to all alterations, changes, additions or repairs to existing excavations, fills, borrow pits, borrow areas occurring after the effective date of this chapter and no such work shall be commenced or completed except in compliance with the regulations set forth in this chapter.*
- B. These regulations shall not apply to the following:*
- 1. Work in any public road, right-of-way or easement, unless the work affects or is involved in the construction of a building or structure subject to regulations of the city building code;*
  - 2. Work in any street, road or highway owned and under the control of the state or the city;*
  - 3. The depositing of rubbish or other material at any dump or sanitary fill operated by the county of Santa Barbara or by the city or by any agency under contract with the city or county;*
  - 4. Work involved in the construction of dams or reservoirs regulated by the state Department of Water Resources;*
  - 5. The stockpiling of rock, sand aggregate or clay, or the temporary stockpiling of earth in the construction of a building or structure authorized by a valid building permit;*
  - 6. The operations, work or projects of the county or the Santa Barbara County Flood Control and Water Conservation District;*
  - 7. Provided a conditional use permit therefore[sic] has been issued under applicable zoning ordinance, the mining, quarrying, excavating, processing or stockpiling of rock, sand or aggregate, unless such work affects the support of adjacent or contiguous property or structures;*
  - 8. The digging of trenches by public agencies, or public utility companies or oil companies for the purpose of installing public utility pipelines or underground wires or other public*

*utility services or oil pipelines, where the slope of the surface of the ground is less than one vertical to five horizontal. All trenches in areas where the surface is steeper than one vertical to five horizontal shall require a permit;*

9. *The drilling, maintaining or operating of oil wells by persons, firms or corporations having a valid oil drilling permit and complying with all other applicable ordinances and laws.*

*(Prior code § 4603)*

**8.36.050 Grading permit--Required when--Applicability--Waived in lieu of building permit when.**

- A. *No person shall commence or perform any grading, excavation or fill without first obtaining a grading permit from the city engineer. A separate permit shall be required for each building site but one permit may be issued for the main building and all accessory buildings and structures and one permit may include all grading excavation and fill in one building site.*
- B. *In the event all of the requirements of this chapter which are imposed upon any grading, excavation or fill are met in an application for a building permit, the city engineer shall have the authority to waive the permit for such grading excavation or fill in connection therewith.*

*(Prior code § 4604)*

**8.36.060 Grading permit exemptions compliance required.**

*A grading permit shall not be required in the following exceptions, but in all other respects the provisions of this chapter shall apply:*

- A. *An excavation or fill which does not exceed three feet in vertical depth at its deepest point, measured from the natural ground slope, and/or thirty cubic yards of material moved in any twelve-month period. This exception shall not affect the applicability of this chapter to, or the requirement of a grading permit for, any fill made with the material from such excavation;*
- B. *An excavation below finished grade for tanks, vaults, basements, swimming pools, or footings of a building or structure authorized by a valid building permit. This exception does not apply to any fill using materials removed from such excavation.*

*(Prior code § 4605)*

**8.36.070 Grading permit--Application--Filing--Information required.**

*Applications for grading permits shall be filed with the city engineer on forms furnished by the city clerk and shall be accompanied by or include:*

- A. *A description of the land on which the proposed work is to be done, by lot, block, tract, and street address or by similar description;*

- B. *A plot plan to scale showing property boundaries with dimensions, location or existing buildings and structures on the property and within fifteen feet of the boundaries thereof, adjoining streets or easements, present contours and proposed contours after completion of grading, and details of proposed drainage structure, pipelines, walls and cribbing, and plans for final disposition of all surface waters.*
- C. *Quantity and type of material to be graded, excavated or filled;*
- D. *Purpose of grading, excavation or fill;*
- E. *Source of material to be used for fill and/or location to which excavation material will be removed;*
- F. *A statement of starting and completion dates;*
- G. *A statement describing routes for hauling material, hours of work and methods of controlling dust;*
- H. *Name and address of person responsible for the correctness of work done under the permit and for requesting inspections;*
- I. *Plans and specifications when required herein.*

*(Prior code § 4606)*

**8.36.080 Grading permit--Applicant eligibility and bond determined by job size.**

- A. *If the quantity of material to be graded, excavated or filled exceeds ten thousand cubic yards, the application for a permit shall be made by the owner or lessee of the land upon which the grading, excavation or fill is to be made, and such owner or lessee shall also furnish the bond required by this chapter.*

*If the amount of such material to be removed is less than ten thousand cubic yards, the application may be made by the owner or lessee of the land upon which the grading, excavation or fill is to be made, or the application may be made by any authorized contractor or agent of such owner or lessee, and the bond required under this chapter shall be furnished by such applicant.*

*(Prior code § 4607)*

**8.36.090 Permit--Fees.**

- A. *Fees for permits issued and/or services rendered pursuant to this chapter shall be set by resolution of the city council.*
- B. *Public agencies shall not be required to pay a permit fee.*

*(Ord. 282 § 1, 1979; prior code § 4609)*

**8.36.100 Permit—Denial, revocation and suspension when.**

- A. *A permit shall not be issued where the work proposed is likely to endanger public or private property, taking into consideration saturation of earth by rains, surface water runoff, earth movement or subsurface conditions or susceptibility to erosion. Failure of any officer, agent or employee of the city to observe or recognize hazardous conditions shall not relieve the owner or permittee of responsibility for damages from work performed nor transfer responsibility for such damages to the city, nor to any of its officers, agents or employees.*
- B. *Upon failure to comply with any of the conditions of this chapter or the permit, the city engineer may revoke or suspend the permit and, in either case, shall notify the owner or permittee of such action and the reasons therefor. [sic]*
- C. *If the operations of the permittee create an unreasonable nuisance by reason of dust or noise, or otherwise, the city engineer may require the permittee to take reasonable measures to abate such nuisance and may revoke or suspend the permit until such measures are taken.*

*(Prior code § 4608 (part))*

**8.36.110 Grading permit—Expiration.**

*Grading permits shall expire and become null and void if the work authorized under such permit has not commenced within one hundred twenty days or is not completed within one year of the date of issue, except that prior to expiration of the permit, the city engineer may grant a reasonable extension of time upon a showing of evidence that unusual difficulties have prevented start or completion of the work within the time limits specified.*

*(Prior code § 4608 (part))*

**8.36.120 Permit revocation or denial—Appeal.**

*If a permit is denied or revoked under Section 8.36.100, the applicant may appeal to the city council. Such appeal must be in writing and set forth the reason for the denial or revocation of the permit and the ground for appeal, and must be accompanied by a full and correct copy of the applicant's application for such permit. The appeal shall be filed with the city council or with the city clerk. After receipt of the written appeal, the city clerk shall set a date for hearing thereon and cause the applicant to be notified of the time and place for such hearing. At the hearing on such appeal, the applicant or licensee shall present competent evidence and proof that the work proposed to be done can and will be done in compliance with the terms and requirements of this chapter and of any other chapter or laws applicable. The city council may hear any other pertinent evidence and make any investigations and require any other reports and evidence which the city council may consider pertinent in the matter. After such hearing and making any investigations it deems necessary, if the city council finds and determines that the excavation proposed may be in compliance with the terms of this chapter and any other chapters or laws applicable and in such a manner that the resulting excavation or fill will not unreasonably endanger life or property, the city council may impose any reasonable condition and order the*

*city engineer to issue such permit or, in the case of revocation of a permit, to reinstate such permit upon compliance by the permittee of all conditions imposed.*

*(Prior code § 4614)*

**8.36.130 Bond--Required--Cash deposit in lieu of.**

*The applicant for a grading permit shall file a performance bond, pursuant to Chapter 2.17 of this code, prior to the issuance of any grading permit. In lieu of the bond, the applicant may make a deposit of cash or of a certified check or cashier's check.*

*(Ord. 297 § 2, 1981; prior code § 4616)*

**8.36.140 Bond or deposit--Amount.**

*The amount of the bond or deposit shall be fixed by the city engineer. He shall set the same in a sum sufficient to insure prompt completion of the entire excavation project within specified time limits and in compliance with plans and specifications therefor[sic].*

*(Prior code § 4617)*

**8.36.150 Bond--Form.**

*The bond shall:*

- A. Be in form joint and several;*
- B. Name the city as obligee;*
- C. Provide that the term of each bond shall begin upon the date of filing with the city, and shall remain in effect until grading is completed and approved by the city engineer and a notice of completion is filed;*
- D. Provide that in the event of failure to complete the work authorized by the grading permit, the city engineer, subject to the approval of the city council, may order and proceed to complete necessary emergency work and the surety shall be bound under a continuing obligation for the payment of all costs incurred thereby;*
- E. Provide that the surety assents to any extension of the time limit which may be approved by the city engineer.*

*(Prior code § 4618)*

**8.36.160 Bond or deposit--Conditions.**

*Every bond posted and every deposit made pursuant to this chapter shall be conditioned as follows:*

- A. That all work will be done in accordance with approved plans and specifications and in compliance with all terms and conditions of the grading permit.*

*B. That all work will comply with provisions of this chapter and all other applicable laws and ordinances.*

*C. That all maintenance shall be performed for the period of time determined by the city engineer and made a condition of the grading permit.*

*(Prior code § 4619)*

**8.36.170 Assent of surety to time extension.**

*The surety consents to any extension of time granted the permittee by the city engineer. (Prior code § 4620)*

**8.36.180 Blanket bond or deposit when.**

*Any contractor or other person engaged in continuous or repeated excavations may post a blanket bond or a blanket deposit in an amount sufficient to insure prompt completion of all excavation projects being conducted at any one time. If the number or amount of excavation projects exceeds the amount of the bond or deposit, the city engineer may require additional bond or deposit to insure completion of all work being done at any one time\*

*(Prior code § 4621)*

*The permittee and his agents shall carry out the proposed grading in accordance with approved plans and specifications, the conditions of the permit and with the requirements of this chapter. The permittee and his agents shall maintain all required protective devices and temporary drainage during the progress of the grading work and shall be responsible for observance of hours of work, dust controls and methods of hauling. The permittee or his agents shall be responsible for maintenance of the site until such time as a certificate or notice of final approval has been granted by the city engineer. The permittee, his agents, and each or all of them shall become subject to the penalties set forth in this chapter in the event of failure to comply with this chapter and other applicable laws of the city. No approval shall exonerate the permittee or his agents from the responsibility of complying with the provisions and intent of this chapter. If at any time it is determined by the city engineer that material has been spilled upon city streets during the course of hauling material from the site by the permittee, the city engineer shall immediately notify the permittee to remove the material from the city streets and to clean the city streets, including the sweeping thereof. If such material is not removed and the city streets cleaned within forty-eight hours after receiving such notice, the city engineer may cause the street to be cleaned by city forces at the expense of the permittee.*

*(Prior code § 4615)*

**8.36.200 Inspections and grading certificate issuance.**

*A. During progress of work under a grading permit, inspections shall be made as provided in this section and work shall not continue until approval to proceed with any changes specified*

has been granted following inspection. The permittee shall be responsible for notifying the city engineer at least twenty-four hours prior to the time when inspection is to be made.

1. Initial inspection shall be made before any work is begun on excavation or fill.
  2. Rough grading inspection shall be made during the work upon request of the owner, lessee, or permittee and when all rough grading is completed.
  3. Structures inspection shall be made when pipe or reinforcing is in place and before concrete is poured or pipe is covered for all supporting, containing and protective structures.
- B. Upon request, the city engineer shall issue a grading certificate after all grading work is completed, certifying that such work was completed in accord with the conditions of the permit and the provisions of this chapter.

(Prior code § 4610)

#### **8.36.210 Standards and specifications.**

- A. No excavation shall be made with a cut face steeper in slope than one and one-half horizontal to one vertical, except under one or more of the following conditions:
1. The material in which the excavation is made is sufficiently stable to sustain a slope of steeper than one and one-half horizontal to one vertical, and a written statement of a civil engineer, retained by the owner or permittee, licensed by the state of California, to that effect is submitted and approved by the city engineer. The statement shall state that the site has been inspected and that the deviation from the slope specified above will not result in property damage. Where, in the judgment of the city engineer, additional tests are required, he may require soil tests and laboratory tests by a qualified soils engineer approved by the city engineer;
  2. A retaining wall or other approved support is provided to support the face of the excavation.
- B. All graded surfaces and materials, whether filled, excavated, transported or stockpiled, shall be wetted, protected or contained in such a manner as to prevent any nuisance from dust, or spillage upon adjoining property, or streets. Equipment and materials on the site shall be used in such a manner as to avoid excessive dust. Roadways on the site shall be surfaced or wetted sufficiently to prevent excessive dust.
- C. If drainage facilities and grading shall be so designed and maintained that drainage is directed into or upon public streets, it shall be done in a manner and at a location to be approved by the city engineer, or into natural or improved drainage channels in a manner and at a location approved by the city engineer.
- D. Exposed banks or slopes, both cut and fill, shall be smoothly finished by blading or hand-sloping or equal, and no such bank or slope shall exceed a height of twenty five feet without

*terraces or berms approved by the city engineer. Down drains from terraces shall consist of pipes or paved channels or other means approved by the city engineer.*

- E. Berms having a minimum width of five feet shall be provided between the top or bottom of a slope and road right-of-way.*
- F. Road right-of-way lines shall be so designed that all cut and fill slopes are included within such right-of-way lines.*
- G. All cut and fill slopes shall be within properties or parcels under one ownership, that is, they shall not be divided horizontally.*
- H. Exposed slopes in excess of three feet in vertical heights shall be planted to prevent erosion, or otherwise protected in a manner approved by the city engineer, unless by reason of soil conditions or the location of the site, the city engineer determines such planting is not necessary to prevent erosion.*
- I. The city engineer may require an excavation to be made with a cut face flatter in slope than one and one-half horizontal to one vertical if he finds the material in which the excavation is to be made unusually subject to erosion, or if other conditions make such flatter cut slope necessary for stability and safety.*
- J. Excavations shall not extend below the angle of repose or natural slope of the soil under the nearest point of any footing or foundation of any building or structure, unless such footing or foundation is first properly underpinned or protected against settlement.*
- K. No fill shall be made which creates any exposed surface steeper in slope than two horizontal to one vertical, except under one or more of the following conditions:*
  - 1. The fill is located so that settlement, sliding or erosion of the fill material will not result in property damage or a hazard to adjoining property, streets or buildings;*
  - 2. A written statement from a civil engineer, licensed by the state of California, certifying that he has inspected the site and that the proposed deviation from the slope specified above will not endanger any property, or result in property damage, is submitted to and approved by the city engineer.*
- L. The city engineer may require that the fill be constructed with an exposed surface flatter than two horizontal to one vertical, if he finds that, under the particular conditions, such flatter surface is necessary for stability and safety.*
- M. Whenever a fill is to be made of materials other than clean soil or earth, the grading permit issued by the city engineer shall be subject to the following additional limitations and requirements:*
  - 1. The fill shall be completed within a reasonable length of time, said time limit to be determined by the city engineer and to be specified on the grading permit.*

2. *No grading permit shall be issued for the filling of materials other than clean soil or earth until a faithful performance bond in the amount of at least ten percent more than the estimated cost of adequately covering such fill with clean soil or earth has been filed with the city engineer and approved by him. Such faithful performance bond shall be executed by a corporate surety and shall be approved as to form by the city attorney. Such bond shall insure to the benefit of the city and be conditioned upon the faithful performance of the work required under the terms and conditions of the grading permit to the satisfaction of the city engineer. In lieu of such faithful performance bond, a cash deposit in such amount may be made to the city clerk with the approval of the city engineer.*
- N. All fills intended to support buildings, structures, or where otherwise required to be compacted for stability of material, shall be compacted, inspected and tested in accordance with the following provisions:*
1. *The natural ground surface shall be prepared by removal of topsoil and vegetation, and if necessary, shall be graded to a series of terraces.*
  2. *The fill shall be spread in a series of layers, each not exceeding six inches in thickness, and shall be compacted by sheepsfoot roller or other approved method after each layer is spread.*
  3. *The moisture content of the fill material shall be controlled at the time of spreading and compaction to obtain required maximum density.*
  4. *The fill material after compaction shall have minimum relative density of not less than ninety percent of maximum density, as determined by the AASHO Soil Compaction Test, T99-49, as modified, to use twenty-five blows of a ten-pound hammer falling eighteen inches in each of three layers of soil in a one-thirtieth cubic-foot cylinder, or other approved testing method giving equivalent test results, in all portions of the fill requiring compaction.*
  5. *A compaction test, as provided in this subsection shall be taken for each eighteen inches of fill, or portion thereof, measured vertically from the lowest point of the area to be filled.*
  6. *A written report of the compaction, showing location and depth of test holes, materials used, moisture conditions, recommended soil-bearing pressures, and relative density obtained from all tests, prepared by a civil engineer licensed by the state of California shall be submitted to the city engineer for approval.*
- O. The city engineer may require additional tests or information if the conditions or materials are such that additional information is necessary and may modify or delete any of the above listed requirements that are unnecessary.*

*(Prior code § 4613)*

**8.36.220 Civil engineer supervision permitted when**

*The city engineer may authorize work done under supervision of a registered civil engineer retained by the owner or the permittee, and accept such certifications by the engineer as will insure that the work was done in accord with the provisions of the permit and of this chapter.*

*(Prior code § 4611)*

**8.36.230 Special precautions and stop-work order.**

*The city engineer may issue a stop-work order if, at any time during progress of the work it appears that public or private property is endangered and may impose special precautions to be followed as a condition for continuance of the work. Such special precautions may include, but shall not be limited to, flatten exposed slopes, additional drainage facilities, berms, terracing, compaction, cribbing and retaining walls.*

*(Prior code § 4612)*

**8.36.240 Violations deemed unlawful.**

- A. No person, as defined in this chapter, shall construct, enlarge, alter, repair or maintain any grading, excavation or fill, or cause the same to be done, contrary to or in violation of any provision of this chapter.*
- B. It is unlawful for any person to violate any of the provisions of this chapter and each person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this chapter is committed, continued or permitted.*

*(Ord. 378 § 9, 1985; prior code § 4622).*

**4.1 Best Management Practices****4.1.1 Discretionary Project Review**

- A. In addition to the regulations of the grading ordinance, the City has a number of 'standard conditions' relating to construction site controls that are applied to new discretionary projects. For example, large projects (greater than or equal to 1 acre of soil disturbance) are required to develop erosion control plans for construction and have specific requirements under the Construction General Permit (99-08-DWQ) relating to fueling and maintenance of equipment and control of construction site debris. Currently, the City standard conditions of approval state 'development shall be undertaken in accordance with conditions and requirements of the State of California Regional Water Quality Control Board. Project Grading and Storm Drain Improvement Plans shall identify and incorporate Best Management Practices (BMPs) appropriate to the uses conducted on-site and during construction to effectively mitigate storm water pollution.' However, the City recognizes that its needs to develop and/or revise its current project review procedures to further consider water quality impacts, therefore, the measurable goals of this BMP are:*

1. Develop standard conditions guidance.
2. Continue to implement the current conditions of approval.
3. Develop BMP policy and procedures manual.
4. Develop BMP requirements included in project approval.
5. The City will review and update standard conditions of approval annually.
6. Waste Discharge Identification (WDID) numbers will be required for projects that propose soil disturbance of greater than 1 acre.
7. Review site plans before ground is broken on site.
8. Develop tool to track and monitor new construction activities for compliance.

The effectiveness measures of this BMP are that the standards conditions guidance manual will be developed in year 2 year of the permit term, The BMP policy and procedures manual will be developed by year 3. In the interim, the City is using the City of Santa Barbara Storm Water BMP guidance manual. BMP requirements included in project approval and City review of site plans before ground is broken on site are both procedures that the City already engages. These on-going procedures will be evaluated annually and updates will be made as necessary. The standard conditions of approval are updated on an as needed basis as state and federal requirements change. A new tool to track construction site activities and record site owner, contractor, start dates, size (in acres), inspection dates, results and notes from inspectors, comments from the public, etc. will be developed in Year 3 of the permit term. This information will be available to the public upon request. The effectiveness measure of this BMP will be less sediment and erosion on construction sites. Public Works staff and Parks and Recreation staff track and monitor their respective department projects. All other construction activities are monitored by the City building inspector.

#### **4.1.2 Update Construction Site Controls, Procedures and Enforcement Procedures**

Presently, Chapter 8.36, "Excavation and Grading," of the City's municipal code, embodies the regulations under which construction site operators and grading operations work. In general, all grading/earth moving (except specific uses exempted under section 8.36.040 of the aforementioned municipal code) require a grading permit and bonding. Applications for grading permits require a description of the land upon which the grading occurs, a description of the proposed work, its purpose, quantity and type of material, source of material and/or fill location, and a plot plan showing all property dimensions, existing structures on property, including those within 15 feet of the property boundaries, adjoining easements, existing contours, proposed contours, details of drainage, drainage structures (pipelines, walls, cribbing), and plans for final disposition of all surface waters. Grading permit applications are reviewed and must meet the aforementioned criteria prior to approval by City authorities and issuance of a grading permit.

In addition, the City requires protective devices and temporary drainage to be maintained through the duration of earthmoving, grading, and construction activities. Inspection of construction sites/grading activities are conducted by dedicated City staff. The frequency of inspections depends on the length of the proposed earthmoving, grading, and construction activity and the disposition of previous inspections. Operators found in non-compliance with the ordinance or terms of the permit, either through an inspection or because of public complaint, are issued a stop work order, and no work is allowed to resume until all violations have been abated. In the event of non-compliance, the City will enforce the following municipal code sections:

**1.08.010 Violation or noncompliance--Prosecution authorized.**

*It is unlawful for any person, firm or corporation to violate any provision of or to fail to comply with, any requirement of this Carpinteria Municipal Code. Any person violating any of the provisions or failing to comply with any of the mandatory requirements of this Carpinteria Municipal Code, shall be guilty of a misdemeanor unless the city attorney authorizes issuance of an infraction citation or files a complaint charging the offense as an infraction or the court, with the consent of the defendant, determines that the offense is an infraction.*

*(Ord. 600 § 1, 2004; Ord. 375 § 1 (part), 1985; Ord. 247 § 1 (part), 1978; prior code § 1200)*

**1.08.020 Misdemeanors--Penalty.**

*Any person, firm or corporation convicted of a misdemeanor under the provisions of this code shall be punished by a fine of not more than one thousand dollars or by imprisonment in the city or county jail for a period of not exceeding six months or by both such fine and imprisonment.*

*(Ord. 375 § 1 (part), 1985; prior code § 1200.2)*

**1.08.030 Infractions--Penalty.**

*Any person, firm or corporation convicted of an infraction under the provisions of this code shall be punished by:*

- A. A fine not exceeding one hundred dollars (\$100.00) for a first violation;*
- B. A fine not exceeding two hundred dollars (\$200.00) for the second violation of the same section within one year;*
- C. A fine not exceeding five hundred dollars (\$500.00) for each additional violation of the same section within one year; and*
- D. A fine not exceeding two hundred fifty dollars (\$250.00) for each violation of subsections 12.24.021(A)(2) and (3).*

*Any infraction may be prosecuted by the city authorities in the name of the people of the state of California or redressed by civil action.*

*(Ord. 598 § 3, 2004; Ord. 375 § 1 (part), 1985; Ord. 247 § 1 (part), 1978; prior code § 1201)*

**1.08.040 Continuing violation--Penalty.**

*It shall constitute a new and separate offense for each and every day during any portion of which a violation of or failure to comply with, any provision or requirement of this code is committed, continued or permitted by any person, firm or corporation and shall be punishable accordingly.*

*(Ord. 375 § 1 (part), 1985: Ord. 247 § 1 (part), 1978: prior code § 1202)*

#### **1.08.050 Injunctive relief.**

*Whenever any person, firm or corporation, whether acting as principal, agent, employee or otherwise, is about to engage in any act or practice which or will constitute the violation of any provision of this municipal code, the city attorney may make application to the Superior Court for an order enjoining such act or practice or for an order directing compliance and upon a showing by the city that said person, firm or corporation has engaged in or is about to engage in any such act or practice, a permanent or temporary injunction, restraining order or other order may be granted by the court in accordance with applicable law.*

*(Ord. 375 § 1 (part), 1985: Ord. 247 § 1 (part), 1978: prior code § 1203)*

#### **1.08.060 Abatement.**

*In the event that any person, firm or corporation shall fail to abate a violation hereunder, after notice of the same opportunity to correct or terminate the activities constituting a violation and after any final order from an appeal if allowed by law, the city attorney may apply to the Superior Court for an order authorizing the city to undertake those actions necessary to abate the violation and require the violator to pay for the cost of such undertaking.*

*(Ord. 375 § 1 (part), 1985: Ord. 247 § 1 (part), 1978: prior code § 1204)*

The NPDES General Permit requirements provide for “An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under State or local law.” Pursuant to this requirement, and in consideration of the body of policies and procedures that currently do exist and are enforced, the measurable goal of BMP 4.1.2 is that the City will conduct a thorough review of existing regulations and update all existing language on construction site controls and procedures, specifically erosion and sediment control BMPs, good housekeeping practices for recycling and disposal of building materials, concrete truck washouts, chemicals, trash, and sanitary waste at all construction sites. In addition, the City will develop new language that will either augment the existing code or be a separate ordinance to address holistic site planning techniques and strategies for the minimization of soil movement. The review of existing language and development of new regulatory language will be conducted in the first year of the permit term. Language will also be developed to ensure compliance with the new regulations, including procedures on enforcement and explanation of escalating fines for non-compliance. All

required language will be available for public review, and a publically noticed meeting will be held prior to any such language or ordinance being adopted. Specifically,

- The City will review existing language, and will either develop new language to augment existing language or develop a new ordinance.
- The language and/or new ordinance will incorporate new definitions that conform to those used within the General Permit
- The language/ordinance will provide specific guidance on the use of approved BMPs
- The language/ordinance will enhance site inspection procedures
- The language/ordinance will include enforcement procedures
- The language/ordinance will provide for more prescriptive language regarding erosion and sediment control
- The language/ordinance will include specific requirements for construction site operators to control waste such as discarded building materials, concrete truck washouts, chemicals, trash, and sanitary waste at all construction sites
- The City will continue to enforce current municipal code provisions at all construction sites.

The effectiveness measures of this BMP are that:

- In year 1, the City will review existing language, and will develop new language to augment existing language or develop a new ordinance.
- The language developed in year 1 will conform to that used within the General Permit.
- Language will make specific reference to approved BMPs
- Updated language will require more frequent and exhaustive inspection procedures
- Prescriptive language for erosion and sediment control will be included
- Language will be very specific on the requirements for construction site operators to control waste such as discarded building materials, concrete truck washouts, chemicals, trash, and sanitary waste at all construction sites
- A public comment period on the language/ordinance will be held, followed by a City Council hearing on adoption of language/ordinance
- Continued enforcement of current standards

#### **4.1.3 Site Inspection Checklist and Database**

The measurable goal of this BMP is that the City will develop a more exhaustive inspection checklist that best assesses BMPs required by the City and executed on the site and that gives the City a clear idea of the conditions on each site. The City will make signage with the City's hotline number available and visible on all construction sites. Projects disturbing one acre or

more of ground, or that are part of a larger project, will be inspected weekly during construction. They will be inspected 24-48 hours before and after forecasted rain events. The City will also train inspectors on use of the checklist and develop a database for information contained in the checklist. The database will be able to provide statistical analysis on the effectiveness of BMPs. The effectiveness measures associated with this BMP are the development of the checklist, receipt and consideration of comments from the public, a quiz administered at the end of the training and the statistical analysis produced by the database.

#### **4.1.4 Develop and Implement an Education and Training schedule for Staff**

Project reviews are conducted by the Public Works and Community Development staff. The City staff will develop and implement an education and training schedule for staff on the proper installation, operation, and maintenance of construction site BMPs, as well as inspection methods and enforcement strategies. The measurable goal of this BMP is that 100% of staff to be trained annually on the proper installation, operation, and maintenance of construction site BMPs, as well as inspection methods and enforcement strategies. Staff will also be trained to understand regulations, compliance standards, techniques, and new City procedures and recommended practices to prevent pollutant discharge. The effectiveness measures are documented attendance at workshops, topics discussed, and issues raised, as well as the number of documented decreases of pollutant discharge on construction sites.

#### **4.1.5 Develop and Implement an Education and Training Schedule for Construction Site Operators**

The goal of the BMP is to reduce pollutants in stormwater runoff that are associated with construction by controlling the discharge of pollutants from construction activities. The measurable goal of this BMP is to provide education and training to construction site operators annually on appropriate BMPs for different sites and conditions for erosion and sediment control. Training will include information on proper installation and maintenance of erosion and sediment controls, site planning, minimization of soil movement, capture of sediment, etc., and reference widely used BMP manuals. The effectiveness measure will be to document number of trainings, content, and attendance of staff and site operators and compare with previous years of BMP effectiveness documents.

### **4.2 Reporting**

Feedback from City inspectors, RWQCB staff, construction contractors, project owners, and the public will be evaluated, and potential changes to the municipal code and its implementation will be evaluated using the Effectiveness Assessment Strategy.

**Table CSRC**  
**Construction Site Runoff Control**

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable	Pollutants of Concern
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Table CSRC

BMP#	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern	
SRC BMP 4.1.1 Discretionary Project Review	Develop and/or Revise Discretionary Project Review Procedures Considering Potential Water Quality Impacts	To reduce pollutants in stormwater runoff that are associated with construction by controlling the discharge of pollutants from construction activities.	Develop standard conditions guidance.	Standard Conditions Guidance developed by end of Year 2		2					Sediment, trash, building materials, pathogens chemicals associated w/ construction sites
			The City will continue to implement current conditions of approval.	Continued implementation of conditions of approval.	1	2	3	4	5		
			Develop BMP policy and procedures manual.	BMP policy and procedures manual developed by end of year 3			3				
			Develop BMP requirements included in project approval.	Ongoing, documentation of requirements	1	2	3	4	5		
			The City will review and update, if necessary, standard conditions of approval annually	Standard conditions of approval updated as needed to comply with new local, state and federal requirements	1	2	3	4	5		
			Waste Discharge Identification (WDID) numbers will be required for projects that propose soil disturbance of greater than 1 acre	Verification that the project applicant is covered by the state wide General Permit for Storm Water Discharges		2	3	4	5		
			City will review site plans before ground is broken on site.	Ongoing, documentation of review	1	2	3	4	5		
Develop tool to track new construction activities for compliance	City tracking new construction, site owner, contractor, start dates, size (in acres), inspection dates, results and notes from inspectors, comments from the public, etc. using tool by end of year 3			3	4	5					

Table CSRC

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable				Pollutants of Concern
CSRC BMP 4.1.2 Construction Site Controls, Procedures and Enforcement	Update Construction Site Controls, Procedures and Enforcement in conjunction with IDDE BMP 3.1.3	To reduce pollutants in stormwater runoff associated with construction by controlling the discharge of pollutants from construction activities.	The City will review existing language, and will either develop new language to augment existing language or develop a new ordinance.	Review of existing language	1				Sediment, trash, building materials, pathogens chemicals associated w/ construction sites
				Development of new regulatory language will be conducted in year 2	2				
			The language and/or new ordinance will incorporate new definitions that conform to those used within the General Permit	Language will conform to the General Permit	2				
			The language/ordinance will provide specific guidance on the use of approved BMPs	Language/ordinance will be developed in Year 2	2				
			The language/ordinance will enhance site inspection procedures	More frequent and exhaustive inspection procedures language in Year 2	2				
			The language/ordinance will include enforcement procedures	Language will address escalating enforcement in Year 2	2				
		The language/ordinance will provide for more prescriptive language regarding erosion and sediment control	Prescriptive language developed in Year 2	2					

Table CSRC

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern	
			<p>The language/ordinance will include specific requirements for construction site operators to control waste such as discarded building materials, concrete truck washouts, chemicals, trash, and sanitary waste at all construction sites</p> <p>Language or ordinance adopted by City Council and enforced 30 days after.</p> <p>Construction sites will be visited monthly to assure compliance with control measures.</p> <p>The City will continue to enforce current municipal code provisions at all construction sites</p>	<p>Specific language included in Year 2</p> <p>After public comment period and City Council Hearing, the language/ordinance will be adopted.</p> <p>Site visit records and notes.</p> <p>Continued enforcement of current provisions at all construction sites</p>		2					
							3				
							3	4	5		
						1	2	3	4	5	
<b>CSRC BMP 4.1.3</b> Site Inspection Checklist and Database	The City will develop a construction site checklist and Database	To effectively assess proper uses of construction site BMPs and track use	<p>The City will develop a more exhaustive checklist for inspectors to use during site visit</p> <p>The City will train inspectors on the checklist</p>	<p>Development of checklist</p> <p>Quiz at the end of training</p>			3	4	5	Sediment, trash, building materials, pathogens, chemicals associated w/ construction sites	
							3	4	5		

Table CSRC

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
			<p>The database will be referred to for statistical analysis and to track BMP effectiveness annually</p> <p>The City will make signage with the City's hotline number available and visible on all construction sites for receipt and consideration of comments from the public.</p>	<p>Statistical analysis</p> <p>Signage with the City's hotline number will be on and visible at 100% of all construction sites, public comments responded to.</p>			3	4	5	
			<p>Projects disturbing one acre or more of ground, or that are part of a larger project, are inspected weekly during construction. They will be inspected 24-48 hours before and after forecasted rain events.</p>	<p>Regular inspection of projects disturbing one acre or more of ground.</p>	1	2	3	4	5	

Table CSRC

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
CSRC BMP 4.1.4 Staff Training	Develop and Implement an Education and Training schedule for Staff	To reduce pollutants in stormwater runoff that are associated with construction by controlling the discharge of pollutants from construction activities.	100% of staff to be trained annually on the proper installation, operation, and maintenance of construction site BMPs, as well as inspection methods and enforcement strategies.  Staff will also be trained to understand regulations, compliance standards, techniques, and new City procedures and recommended practices to prevent pollutant discharge	Document attendance at workshops, topics discussed, and issues raised.	1	2	3	4	5	Sediment, trash, building materials, pathogens chemicals associated w/ construction sites
				Number of documented decreases of pollutant discharge in on construction sites.	1	2	3	4	5	
				All participants will take a quiz on training to assess the effectiveness of the session; results will be recorded	1	2	3	4	5	
CSRC BMP 4.1.5 Construction Site Operator Training	Develop and Implement an Education and Training schedule for Construction Site Operators	To reduce pollutants in stormwater runoff that are associated with construction by controlling the discharge of pollutants from construction activities.	Provide education and training to construction site operators annually on the most appropriate BMPs for different sites and conditions on erosion and sediment control.  Training will include information on proper installation and maintenance of erosion and sediment controls, site planning, minimization of soil movement, capture of sediment, etc, and reference widely used BMP manuals	Number and content of trainings annually	1	2	3	4	5	Sediment, trash, building materials, pathogens chemicals associated w/ construction sites
				Percentage attendance of site operators  Reduction in the incidences construction sites						

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## **5.0 POST-CONSTRUCTION RUNOFF CONTROL**

Post-construction stormwater management in areas undergoing new development or redevelopment is necessary for long-term watershed protection because runoff from these areas has been shown to significantly affect receiving water bodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction stormwater discharges is the most cost-effective approach to stormwater quality management. Once built, it is complex and expensive to retrofit the urban landscape with stormwater BMPs. Therefore, this control measure focuses on the integration of stormwater considerations into site planning and design processes, which is most effective when addressed in the early stages of project development. Effective long-term management and maintenance are critical; therefore, this control measure must incorporate a structure for a means to legally assign and pass on responsibility for maintenance of BMPs with the authority to enforce stormwater design and maintenance requirements. The goal of this MCM is to provide the structure for the City to protect water quality from new development and redevelopment.

The Community Development Director and Public Works Director of the City will work together in implementing this SWMP element.

### **5.1 Best Management Practices**

#### **5.1.1 Land Use Policies**

Under State planning law and CEQA, the City is responsible for evaluating new development and redevelopment projects for NPDES concerns. Therefore, the City has a key role in implementing the NPDES Phase II post-construction runoff control measures. To assure compliance with NPDES Phase II objectives, the City intends to interpret and apply its land use policies, implementation tools (i.e., standard conditions of approval, building permits, etc), and enforcement of mitigation measures to protect urban runoff. Land use policies will be reviewed and revised as necessary once every permit term in order to adequately address evolving goals.

Existing land use policies in the General Plan provide a strong framework for water quality protection and compliance. Policies are implemented through the City's development review and permitting process (described in more detail in BMP 5.1.2), where they are translated into conditions of approval. The conditions of approval are enforced under Zoning Code section 14.84.20-14.84.100 and during the construction inspection process (see BMP 5.1.9 for more detail). Because the City is entirely within the Coastal Zone, the City is also required to comply with requirements set forth by the California Coastal Commission, one of which is to develop a Local Coastal Plan. As an implementation program for the Local Coastal Plan, the City created the CCPP. The CCPP is designed to guide the preservation and restoration of creeks within the City, and program elements are reviewed annually. Under the Carpinteria Creeks Preservation Program, the City conducted a review of existing land use policies with respect to creek

preservation and made recommendations on additional policies needed to implement California Coastal Commission and NPDES requirements. As discussed in the section titled “SWMP Implementation and Coordination,” the goals of the CCPP parallel the intent of the SWMP; therefore, efforts between the two programs are complimentary and will be coordinated. Relevant General Plan/Local Coastal Plan objectives are listed below.

### ***Open Space, Recreation, and Conservation Element***

***Objective OSC-1c.*** Establish and support preservation and restoration programs for natural areas such as Carpinteria Creek, Carpinteria Bluffs, Carpinteria Salt Marsh, seal rookery, Carpinteria reef, Pismo clam beds, and intertidal zones along the shoreline.

***Implementation Policy 10.*** Provide public education and information services on the community's significant natural resources including the creeks, the Carpinteria Salt Marsh, coastal bluff areas, Monarch butterfly habitat, etc., to increase community awareness of sensitive environmental habitats and their value to Carpinteria.

***Objective OSC-3c.*** Development adjacent to the required buffer around wetlands should not result in adverse impacts including but not limited to sediment, runoff, chemical and fertilizer contamination, noise, light pollution, and other disturbances.

***Implementation Policy 12.*** Maintain a minimum 100-foot setback/buffer strip in a natural condition along the upland limits of all wetlands.

***Objective OSC-6a:*** Support the preservation of creeks and their corridors as open space, and maintain and restore riparian habitat to protect the community's water quality, wildlife diversity, aesthetic values, and recreational opportunities.

***Objective OSC 6b:*** Protect and restore degraded creeks on City-owned land where protection and restoration does not interfere with good flood control practices.

***Objective OSC-6e:*** Natural drainage patterns and runoff rates and volumes shall be preserved to the greatest degree feasible by minimizing changes to natural topography and minimizing the areas of impervious surfaces created by new development.

***Objective OSC-6f:*** All development shall be evaluated for potential adverse impacts to water quality and shall consider Site Design, Source Control, and Treatment Control BMPs in order to minimize polluted runoff and water quality impacts resulting from the development. In order to maximize the reduction of water quality impacts, the BMPs should be incorporated into the project design in the following progression: (1) Site Design BMPs, (2) Source Control BMPs, and (3) Treatment Control BMPs.

***Implementation Policy 25.*** A setback of 50 feet from top of the upper bank of creeks or existing edge of riparian vegetation (dripline), whichever is further, shall be established and maintained for all development. This setback may be increased to account for site-specific conditions.

**Implementation Policy 27.** Prepare and implement a Watershed Management Plan in coordination with the County and Carpinteria Valley Water District with an emphasis on erosion control, natural waterway restoration and preservation, wildlife habitat restoration, and water quality.

**Implementation Policy 31.** Develop a water pollution avoidance education program, to include distribution of literature on how to minimize point and non-point water pollution sources, and development of a curb drain inlet stenciling program to deter dumping of pollutants.

**Implementation Policy 33.** In order to protect watershed in the City, all development shall minimize water quality impacts, particularly due to stormwater discharges from existing, new, and redeveloped sites by implementing the following measures:

- a. Site Design BMPs, including but not limited to reducing imperviousness, conserving natural areas, minimizing clearing and grading, and maintaining predevelopment rainfall runoff characteristics shall be considered at the outset of the project.
- b. Source Control BMPs shall be preferred over treatment control BMPs when considering ways to reduce polluted runoff from development sites. Local site and soil conditions and pollutants of concern shall be considered when selecting appropriate BMPs.
- c. Treatment Control BMPs such as bio-swales, vegetated retention/detention basins, constructed wetlands, stormwater filters, or other areas designated to control erosion and filter stormwater pollutants prior to reaching creeks and the ocean shall be implemented where feasible.
- d. Structural BMPs (or suites of BMPs) shall be designed to treat, infiltrate, or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour runoff event for volume-based BMPs, and/or the 85th percentile, 1-hour runoff event, with an appropriate safety factor (i.e., 2 or greater), for flow based BMPs.
- e. Permits for new development shall be conditioned to require ongoing maintenance where maintenance is necessary for effective operation of required BMPs. Verification of maintenance shall include the permittee's signed statement accepting responsibility for all structural and treatment control BMP maintenance until such time as the property is transferred and another party takes responsibility. The City, property owners, or homeowners associations, as applicable, shall be required to maintain any drainage device to insure it functions as designed and intended. All structural BMPs shall be inspected, cleaned, and repaired when necessary prior to September 30th of each year. Owners of these devices will be responsible for insuring that they continue to function properly and additional inspections should occur after storms as needed throughout the rainy season. Repairs, modifications, or installation of additional BMPs, as needed, should be carried out prior to the next rainy season.

*Objective OSC-7: Conserve native plant communities.*

*Objective OSC-10a: Minimize the erosion and contamination of beaches. Minimize the sedimentation, channelization, and contamination of surface water bodies.*

*Implementation Policy 49. Monitor surface water runoff to identify waterborne pollutants entering the Pacific Ocean. In conjunction with County and Carpinteria Valley Water District, a Watershed Management Plan should be established to prevent such contamination from occurring.*

*Implementation Policy 52. Ensure that soil erosion and the off-site deposition of soils is not exacerbated through development.*

The measurable goals for this BMP are to continue implementing the land use policies and to review and them by Q8 of the Joint Hydromodification Effort, if necessary, and continued implementation of current land use policies. The effectiveness of this BMP will be measured by the successful completion of the policy review and updates to existing policy, where necessary, and the tracking of LID strategies and BMPs in development projects that have been implemented.

### 5.1.2 Design Review Process

The City currently implements land use policies through the development application review process. While stormwater considerations are incorporated into the application review process through public works input on project applications, the City plans to more formally integrate stormwater considerations into the process through the review of current guidance and documentation of requirements and options for stormwater management.

Currently, the process for development project application review is comprised of the following steps, during each of which, City staff will educate applicants as needed on the need for stormwater controls:

- **Pre-Application Consultation:** Project applicants often times visit the Community Development department counter to inquire about procedures for development application and review. Community Development staff provide applicants with application guidance and answer any questions the applicant may have prior to formally submitting a project application. Upon knowledge of the planned project, staff may decide to request a more formal pre-application consultation with the applicant to review specific requirements for the project. The applicant may request the same from the City.
- **Application Submittal:** All development projects must submit an application to the City for a development permit. This formal requirement allows the City to review projects and determine what additional permits or conditions of approval are required. Project applicants must submit multiple copies of the application with all project information

filled in; site plans which must include property lines, setbacks, streets, existing/proposed building footprints, parking footprints, and trees; site topographic/grading/drainage plans with arrows indicating direction of drainage; a soils report if over 700 square feet; building elevations; floor plans; cross sections of the project; roof plan; and a landscape plan.

- **Application Review:** Within 30 days of application submittal, it will be reviewed by staff to determine if it is complete. If it is not complete, the applicant will be sent a letter notifying them that additional information must be submitted for review. If the application is found to be complete, the project will be reviewed by the City's Environmental Review Committee.
- **Environmental Review:** All projects except those categorically exempt from environmental review requirements as established in CEQA undergo review by the City's Environmental Review Committee for environmental impact determination. Environmental impact is determined based on the State of California's CEQA checklist. The Environmental Review Committee will make one of the following determinations:
  1. If the committee finds that the project will not have a significant impact on the environment, then a negative declaration is issued and the project can proceed unless appealed.
  2. If it is found that a previously prepared environmental impact report (EIR) adequately addresses any possible environmental impacts, then a Notice of Subsequent Use is issued and the project can proceed.
  3. If it is found that the project may have significant impact on the environment, then either a mitigated negative declaration will be issued or an EIR required. If an EIR is required, the project cannot proceed until further environmental studies are submitted and approved of by the Environmental Review Committee.
- **Staff Review:** Once determined complete and approved by the Environmental Review Committee, the application and all supporting exhibits and plans are distributed amongst appropriate City departments and jurisdictional agencies including Public Works, Fire, Water, Sanitation, and others as needed for departmental review. At this time, departmental staff require design modifications and specific conditions of approval that are forwarded directly from City staff to project applicants.
- **Planning Commission Review:** This is the ultimate step in planning review. A written report is prepared by City staff that includes a recommended action, findings, and environmental document, and conditions of approval are submitted to the Planning Commission for ultimate approval at a Planning Commission hearing. The report must be completed at least 3 days prior to the hearing and provided to the applicant and all parties listed on the application. At the hearing, the Planning Commission can approve the

project with or without conditions, deny the project, or continue the hearing on a future date.

- **Plan Check and Building Permits:** Following all planning approvals, the applicant may submit a building permit application, working drawings, and support documents to the building department for plan check. Plans are checked for conformance with all codes and conditions of approval. Once checked and approved, a building permit is issued.

This procedure affords a number of opportunities for education, guidance, and enforcement of requirements related to stormwater management. For example, LID information, including examples of appropriate BMPs to use for various projects, is included in the application package. Staff review prior to Planning Commission review ensures incorporation of appropriate BMPs and hydromodification controls necessary for compliance with both interim and long term LID requirements, as well as Attachment 4 design standards. Additionally, the building permit issuance allows for a check on plans to ensure that requirements have been incorporated into design. Lastly, inspection of the development and issuance of an occupancy permit affords yet another opportunity to ensure proper stormwater management (discussed in BMP 5.1.9).

The City will formalize the integration of stormwater quality considerations into the design review process within the first year of the permit term. The stormwater management considerations to be considered during the design review process include the Design Standards summarized in Attachment 4 of the General Permit and interim and long-term hydromodification criteria.

Formal integration will involve a number of steps, which include the following and constitute the measurable goals of this BMP:

1. Develop design review flow chart to conceptualize the process internally for City staff and externally for project applicants
2. Determine when materials will be provided to the applicant as education and guidance on stormwater management requirements
3. Develop guidance materials for project applicants which include requirements of Attachment 4 Design Standards by Q8
4. Determine when it will be confirmed that required stormwater controls have been integrated into project design and that all requirements meet specified criteria
5. Train all City employees annually on updates and modifications to design review procedures and tools
6. Review, and update City guidance documents, CEQA checklists, standard conditions of approval, and other checklists or tools used during design review to ensure that requirements incorporate appropriate stormwater management considerations

7. Develop a database to track and document stormwater BMP implementation
8. Revise design review flow chart to include specific times when stormwater requirements are introduced to the applicant, checked and confirmed, inspected and enforced
9. Application of standard conditions of approval, interim and long term hydromodification control and LID criteria, and Attachment 4 design standards to 100% of projects during the staff review process.
10. The City will review and update land use policies, where necessary, by Q8 of the Joint Hydromodification Effort.
11. Staff will ensure that projects comply with all General Plan, Coastal Plan, CCPP policies and requirements

The effectiveness measures of this BMP are as follows:

1. Development of a clear flow chart depicting the revised design review process integrating stormwater management considerations in Year 1
2. Determination by staff made on when materials are provided to the applicant
3. Completed development of guidance materials for applicants that include the requirements of Attachment 4 Design Standards
4. Training of 100% of employees who review project application submittals
5. To apply standard conditions of approval related to stormwater management (including hydromodification controls, LID criteria and Attachment 4 design standards) to all projects by the end of the permit term.
6. Development of database tracking stormwater BMP implementation and number of projects in which stormwater management controls are incorporated.
7. Design review flowchart revised to include specific time when stormwater requirements are introduced to the applicant, checked and confirmed, inspected, and enforced.
8. Documentation of standard conditions of approval on all projects.
9. The update of land use policies to be consistent with LID and pollution prevention measures by the end Q8 to comply with the Joint Effort.
10. To ensure all new and redevelopment projects comply with City policy by the end of year 1.

### **5.1.3 Enforceable Mechanisms**

As part of the Joint Effort for Developing Hydromodification Control Criteria in Compliance with the Municipal Stormwater Permit (Joint Effort), the City will develop and/or modify

enforceable mechanisms that will effectively implement hydromodification controls, low-impact development (LID) and Attachment 4 design standards. Enforceable mechanisms may include municipal codes, regulations, standards, and specifications. The schedule for implementation refers to the eight 3-month quarters (e.g., Q2, Q4, etc.) of the two-year Joint Effort, and the first quarter of the following year (Q9). For purposes of implementing and tracking Joint Effort BMPs, Quarter 1 will begin upon notification from the Central Coast Water Board. Water Board staff will notify the City by electronic mail of the date that will serve as the start date for quarter 1.

The measurable goals of this BMP include the following:

1. The completion of an analysis of all applicable codes, regulations, standards, and/or specifications that identified modification and/or additions necessary to effectively implement hydromodification controls, LID criteria and Attachment 4 design standards by the end of the second quarter of Joint Effort implementation (Q2). This will be coordinated with reviews conducted in BMP 5.1.2.
2. The approval of new and/or modified enforceable mechanisms that effectively resolve regulatory conflicts and implement hydromodification controls and LID in new and redevelopment project by the end of the eighth quarter of Joint Effort implementation (Q8).
3. Application of new and/or modified enforceable mechanisms to all applicable new and redevelopment projects by the end of the ninth quarter of Joint Effort implementation (Q9).

#### **5.1.4 Hydromodification Control Criteria**

The City will derive municipality-specific criteria for controlling hydromodification in new and redevelopment projects using the Water Board-approved methodology developed through the Joint Effort. The measurable goal for this BMP will be the completion of municipality-specific criteria by the end of the eighth quarter of Joint Effort implementation (Q8).

#### **5.1.5 Applicability Thresholds**

The City will select applicability thresholds for applying Hydromodification Control Criteria to new and redevelopment projects. Applicability thresholds will be consistent with long-term watershed protection. The measurable goal for this BMP will be the completion of applicability thresholds by the end of the eighth quarter of Joint Effort implementation (Q8).

### 5.1.6 Implementation Strategy for Low-Impact Development and Hydromodification Control

The City will develop and enact a strategy for implementing LID and hydromodification control for new and redevelopment projects. The strategy will provide appropriate education and outreach for all applicable target audiences and will include specific guidance for LID BMP design and for complying with hydromodification control criteria. The strategy will also apply LID principles and features to the 2-year period preceding adoption of hydromodification control criteria.

The measureable goals of this BMP include the following:

1. The City will develop, advertise, and make available LID BMP design guidance suitable for all stakeholders by the end of the fourth quarter of Joint Effort implementation (Q4).
2. Specific guidance on how to achieve and demonstrate compliance with the hydromodification control criteria and LID requirements will be made available to new and redevelopment project applicants by the end of the eighth quarter of Joint Effort implementation (Q8).
3. The City will develop goals, schedules, and target audiences for education and outreach conducted in support of the following strategic objectives: enforceable mechanisms, hydromodification control criteria, applicability thresholds, LID BMP design, and compliance with LID and hydromodification control criteria by the end of the second quarter of Joint Effort implementation (Q2).
4. The City will complete a tracking report indicating the City's accomplishments in education and outreach supporting implementation of LID and hydromodification control for new and redevelopment projects by the end of the eighth quarter of Joint Effort implementation (Q8).
5. The City will apply LID principles and features to all applicable new and redevelopment projects beginning in the second quarter of Joint Effort implementation (Q2) and through the eighth quarter of Joint Effort implementation (Q8).
6. The City will complete a second tracking report, identifying LID design principles and features incorporated into each applicable new and redevelopment project for the period beginning in the second quarter of Joint Effort implementation (April 30, 2010) and through the eighth quarter of Joint Effort implementation (October 30, 2012). The tracking report will be complete by the end of the ninth quarter of Joint Effort implementation (Q9).
7. The City will develop a measure that assures long term upkeep of hydromodification controls.

### 5.1.7 Long-Term Watershed Protection

The City has in place or planned for development during the permit term a number of programs with the goal of long-term watershed protection. These include BMPs in all six minimum control measure areas. In order to ensure that such programs and efforts are effectively working toward the goal of long-term watershed protection, the City will develop an approach utilizing quantitative and qualitative information available from such programs to evaluate effectiveness. This will include the development of quantifiable measures that indicate how the City's watershed protection efforts achieve desired watershed conditions, the evaluation of existing watershed protection efforts (land use policies, plans, ordinances, guidance manuals, and BMPs), and the adaptation or modification of existing efforts as a result of inadequacies realized during the evaluation, if necessary.

The measurable goals for this BMP are the development of quantifiable measures indicating the effectiveness of the City's efforts by the end of Year 4 of the permit term and the evaluation of existing efforts and plan/schedule for adaptations/modifications by the end of the permit term. Effectiveness of this BMP will be measured by the development of quantifiable measures and the inclusion of appropriate modifications into the SWMP in application of a permit for the subsequent permit term.

### 5.1.8 Incentive Program for Innovative Site Design

The design community can provide the best source of innovative and appropriate techniques for site designs that minimize runoff. Examples of innovations include 100% vegetation cover for bioswales, use of sand filter/infiltration areas for recreation (i.e., volleyball), turf-grass roofing material, etc.

At least one project that incorporates innovative site design for stormwater management will be identified in the development review process each year for showcase on the City's Stormwater Management webpage. This will increase awareness of LID and also serve as an incentive for developers/architects to incorporate innovative site design elements into projects. This program will be advertised widely to the development community through materials at the Community Development counter and on the Stormwater Management website.

The measurable goals for this BMP is the showcasing of one development project incorporating innovative site design techniques (either creative or above and beyond requirements) on the City's stormwater management website each year, and to advertise the incentive program widely at the Development application counter and on website. The effectiveness will be measured by the successful implementation of the BMP, as well as by the number of projects which incorporate innovative site design techniques or go above and beyond requirements each year.

### 5.1.9 Inspection Procedures and Enforcement

All development projects are inspected following construction prior to issuance of occupancy permits. During the inspections, the City of Carpinteria Building Inspector checks the project to ensure it was built to plan and that all conditions of approval were met. To do so, the Building Inspector conducts the inspection with a copy of the entire final Building Permit, which includes site plans, building plans, drainage plans, and conditions of approval among other more specific supporting items. If the Building Inspector finds that any portion of the plans or standard conditions of approval have not been met, he/she will withhold the occupancy permit until such conditions are met.

The City will ensure that stormwater BMPs are operated and maintained through two procedural mechanisms. First, for projects requiring stormwater BMPs, the City will require in the project conditions of approval that applicants/owners/maintainers submit a brief report to the City exactly 1 year from the date of the issuance of the occupancy permit describing BMP operation over the past year and any maintenance issues that have arisen. Secondly, City staff will inspect approximately 20% of all projects requiring stormwater controls within the City approximately 1 year after construction to ensure that all BMPs are being properly maintained. These assurances will be implemented starting in Year 2 of the permit term. Maintenance conditions will be recorded and tracked in the post-construction BMP database.

The City has the structure to support such assurances due to inspection requirements for other aspects of the development permits. For example, for projects requiring landscape plans, Community Development staff must inspect vegetated areas following construction and vegetative establishment to ensure that maintenance is occurring per the requirements of the landscape plan, which are adopted as conditions of the development permit. If provisions of the landscape plan are not being met, the City has the authority to cash bonds bought by the project applicant at the time of permitting for up to \$500 to do the work necessary to bring the project into compliance with the landscape plan. As stormwater BMPs are incorporated into projects, the City plans to fold inspection of BMPs into the existing project inspection program and may choose to implement a bond assurance program to ensure maintenance as well.

The Zoning Code currently specifies enforcement measures for permit and conditions of approval compliance. Because stormwater management considerations will be folded into conditions of approval, the current enforcement mechanisms cited by the Zoning Code will apply to ensure that all permit terms and conditions of approval related to stormwater management are met. Specific codes related to the enforcement are listed below.

#### ***14.84.020 Agreement to conditions of approval.***

*All permits, development plans and variances containing conditions of approval or requirements for construction or development shall be signed by the applicant authorized by the property*

owner or the property owner, as the case may be, agreeing to do and perform all of such requirements and conditions. Failure to so sign such a document shall render any approval(s) or permits granted pursuant to this title null and void.

(Ord. 315 § 1 (part), 1981)

#### **14.84.030 Findings for approval.**

1. Whenever this title requires a certain set of facts or conditions to be true before approval of the same may be granted by any officer, board, commission or city council, it shall be the duty of the community development director to present a proposed set of findings demonstrating all of such items to be true and to set forth therein as his suggestions for the various factors and facts upon which such findings are based. The failure to present and/or approve such proposed findings shall not invalidate such action taken by such officer, board, commission or city council.
2. In the event of an approval of any permit, development plan, variance or other action required in this title to be based upon a certain set of facts or conditions being true, it shall be presumed that such facts or conditions were true at the time of granting the approval of such permit, variance or development plan. Failure to make express findings shall not invalidate any action.

(Ord. 315 § 1 (part), 1981)

#### **14.84.040 Responsibility for investigations.**

The city manager, his deputies, assistants and the community development department are authorized and directed to investigate all purported violations of any of the provisions of this title.

(Ord. 315 § 1 (part), 1981)

#### **14.84.050 Procedure in cases of violation.**

If a violation is determined to exist or to be impending, the city manager, his deputies, assistants or the community development department are authorized and directed to take such measures as they deem necessary or expedient to enforce and secure compliance with the provisions of this title, including the signing of complaints and other legal documents. Where any building work is being done contrary to the provisions of this title the city manager may order the work stopped by notice in writing served on any persons engaged in the doing or causing such work to be done and any such persons shall stop such work until authorized by the city manager to proceed with the work.

(Ord. 315 § 1 (part), 1981)

**14.84.060 Liability for damage in enforcement actions.**

*The city manager, city council, city attorney, planning commission or any of their deputies, community development department, charged with the enforcement of this title, acting in good faith and without malice for the city, shall not thereby render themselves liable personally and they are relieved from all personal liability for any damage that may accrue to persons or property as a result of any act required or by reason of any act or omission in the discharge of their duties.*

*(Ord. 315 § 1 (part), 1981)*

**14.84.090 Legal action.**

*If unable to otherwise enforce the terms of this title the city manager shall refer the matter to the city attorney for appropriate legal action, civil, criminal or both.*

*(Ord. 315 § 1 (part), 1981)*

**14.84.100 Violation – Penalty.**

*It is unlawful for any person, firm or corporation, whether as principal, agent, employee or otherwise, to violate any provision of this title. Such person, firm or corporation shall be deemed guilty of a separate offense for each and every day during any portion of which any violation of this title is committed, continued or permitted by such person, firm or corporation, and shall be punishable as provided for in this section.*

*(Ord. 378 § 16, 1985: Ord. 315 § 1 (part), 1981)*

The measurable goal for this BMP is inspection of 100% of all projects requiring stormwater BMPs following construction to ensure compliance with standard conditions of approval and inspection of 20% of these projects approximately 1 year after construction to ensure required BMPs are being maintained and the documentation of enforcement of post-construction stormwater controls in the BMP database. The effectiveness of this BMP will be measured by the number of post-construction site inspections conducted relative to the target and on the number of BMP implementation issues effectively resolved by the enforcement structure developed by the City.

**5.1.10 Staff Training**

Public Works and Planning staff will need to be trained on current stormwater management methods, requirements of the SWMP, and current tools the City has available to support implementation of good stormwater management practices (e.g., standard conditions of approval, guidance materials for applicants, BMP design guidance manual). Annual training shall be used to initiate new staff and to provide updates on management practices and City tools. Staff will be trained on City development review procedures, post-construction BMPs, and low-impact site design measures

## 5.2 Reporting

Data collected for each measurable goal will be compiled, reviewed, and summarized in annual reports. Significant variance from targets will be assessed using the Effectiveness Assessment Strategy and discussed in annual reports to RWQCB. Feedback from City staff, permittees, developers, the community interest groups will be used to modify BMPs or the measurable goals, as appropriate; the basis for any changes will be included in the following annual report.

The City will achieve Joint Effort measurable goals by the end of Q2, Q4, Q8, and Q9. The City will report to the Water Board on completion of measurable goals within 30 days of the end of the quarter in which the measurable goal is scheduled for completion. Reporting must include evidence of adequate detail and substance for the Water Board to determine whether the measurable goals is complete.

**Table PCRC  
Post-Construction Runoff Control**

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
					1	2	3	4	5	
PCRC BMP 5.1.1 Land Use Policies	The City will implement land use policies that encourage LID and pollution prevention measures.	To reduce pollutants in stormwater runoff by encouraging LID and pollution prevention measures.	The City will continue to implement land use policies.  The City will review and update land use policies, where necessary, by Q8 of the Joint Hydromodification Effort.	The implementation of LID strategies and BMPs in development projects will be tracked.  The update of land use policies to be consistent with LID and pollution prevention measures by the end Q8 to comply with the Joint Effort.	1	2	3	4	5	Bacteria, Heavy Metals, Pesticides, Sediments, Hydromodification
PCRC BMP 5.1.2 Design Review Process	Formally integrate stormwater management considerations into the design review process.	To integrate stormwater management considerations into the development project review process.	Develop design review flow chart to conceptualize the process internally for City staff and externally for project applicants  Determine when materials will be provided to the applicant as education and guidance on stormwater management requirements.  Develop guidance materials for project applicants which include requirements of Attachment 4 Design Standards by Q8.  Determine when it will be confirmed that required stormwater controls have been integrated into project design and that all requirements meet specified	Development of a clear flow chart depicting the revised design review process integrating stormwater management considerations in Year 1  Determination made by staff  Completed development of materials that include requirements of Attachment 4 Design Standards by Q8  Final determination made	1					Heavy Metals, Pesticides, Sediments, Hydromodification

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years				Pollutants of Concern
			criteria by Q8.						
			Review and update City guidance documents, CEQA checklists, standard conditions of approval, and other checklists or tools used during design review to ensure that requirements incorporate appropriate stormwater management considerations by Q8.	To apply standard conditions of approval related to stormwater management (including hydromodification controls, LID criteria and Attachment 4 design standards) to all projects by the end of Q9			3		
			Train all City employees on updates and modifications to design review procedures and tools by Q8	Training of 100% of employees that review project application submittals	2	3	4	5	
			Develop database tracking stormwater BMP implementation	Database developed and number of projects in which stormwater management controls are incorporated.			4		
			Revise design review flow chart to include specific times when stormwater requirements are introduced to the applicant, checked and confirmed, inspected and enforced.	Design review materials revised			4		
			Application of standard conditions of approval, interim and long term hydromodification control and LID criteria, and Attachment 4 design standards to 100% of	Documentation of Standard Condition on 100% of all projects			3		

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
			<p>projects during the staff review process by Q8.</p> <p>The City will review and update land use policies, where necessary, by Q8 of the Joint Hydromodification Effort.</p> <p>Staff will ensure that projects comply with all General Plan, Coastal Plan, CCPP policies and requirements.</p>	<p>The update of land use policies to be consistent with LID and pollution prevention measures by the end Q8 to comply with the Joint Effort.</p> <p>To ensure all project comply with City policy</p>			3			
<p><b>PCRC BMP 5.1.3</b> Enforceable Mechanisms</p>	<p>The City will develop and/or modify enforceable mechanisms that will effectively implement hydromodification controls and LID.</p>	<p>To develop the language necessary to give the City the authority to enforce criteria and project controls developed through the Joint Effort.</p>	<p>The completion of an analysis of all applicable codes, regulations, standards, and/or specifications that identifies modification and/or additions necessary to effectively implement hydromodification controls, LID criteria, and Attachment 4 design standards by the end of the second quarter of Joint Effort implementation (Q2).</p> <p>The approval of new and/or modified enforceable mechanisms that effectively resolve regulatory conflicts and implement hydromodification controls and LID in new and redevelopment project by the</p>	<p>Documentation of necessary modifications and/or additions to existing codes, regulations, standards and/or specifications.</p> <p>Formal approval of modifications/additions deemed as necessary per above.</p>	1			3		<p>Sediments; Hydromodification</p>

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
			end of the eighth quarter of Joint Effort implementation (Q8)  Application of new and/or modified enforceable mechanisms to all applicable new and redevelopment projects by the end of the ninth quarter of Joint Effort implementation (Q9).	Documentation of enforcement measures taken and resolutions.			3	4	5	
<b>PCRC BMP 5.1.4</b> Hydromodification Control Criteria	The City will derive municipality-specific criteria for controlling hydromodification in new and redevelopment using the Water Board-approved methodology developed through the Joint Effort.	To develop the criteria for controlling hydromodification on most appropriate for specific conditions in Carpinteria.	Completion of municipality-specific criteria by the end of the eighth quarter of Joint Effort implementation (Q8).	Documentation of municipality specific criteria.	2					Sediments; Hydromodification
<b>PCRC BMP 5.1.5</b> Applicability Thresholds	The City will select applicability thresholds for applying hydromodification control criteria to new and redevelopment projects.	To determine the types of projects that would be the most appropriate/effective to apply hydromodification control requirements to.	Completion of applicability thresholds by the end of the eighth quarter of Joint Effort implementation (Q8).	Documentation of applicability thresholds.	2					Sediments; Hydromodification
<b>PCRC BMP 5.1.6</b> Implementation Strategy for LID and Hydromodification	The City will develop and enact a strategy for implementing LID and hydromodification control for new and	To formally develop an implementation strategy for criteria	The City will develop, advertise and make available LID BMP Design Guidance suitable for all stakeholders by the end of the fourth	Documentation of LID BMP design guidance.	1	2	3	4	5	Sediments; Hydromodification

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern	
Control	redevelopment projects. The strategy will provide appropriate education and outreach for all applicable target audiences and will include specific guidance for LID BMP design and for complying with hydromodification control criteria. The strategy will also apply LID principles and features to the two-year period preceding adoption of hydromodification control criteria.	developed through the Joint Effort to ensure effective implementation and protection.	<p>quarter of Joint Effort implementation. (Q4)</p> <p>The City will make available specific guidance on how to achieve and demonstrate compliance with the hydromodification control criteria and LID requirements to new and redevelopment project applicants by the end of the eighth quarter of Joint Effort implementation. (Q8)</p> <p>The City will develop goals, schedules, and target audiences for education and outreach conducted in support of the following strategic objectives: enforceable mechanisms, hydromodification control criteria, applicability thresholds, LID BMP design, and compliance with LID and hydromodification control criteria by the end of the second quarter of Joint Effort implementation. (Q2)</p> <p>The City will complete a Tracking Report indicating the City's accomplishments in education and outreach supporting implementation of LID and</p>	<p>Documentation of guidance developed and when it is provided during the project application process.</p> <p>Documentation of the goals, schedules, target audiences, and participation for all education and outreach efforts related to hydromodification controls implementation.</p> <p>Tracking Report completion.</p>		2	3	4	5		
					1	2	3	4	5		
							3				

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern
			<p>hydromodification control for new and redevelopment projects through the end of the eighth quarter of Joint Effort implementation. (Q8)</p> <p>The City will apply LID principles and features to all applicable new and redevelopment projects beginning in the second quarter of Joint Effort implementation (Q2) and through the end of the eighth quarter of Joint Effort implementation. (Q2-Q8)</p> <p>The City will complete a second Tracking Report, identifying LID design principles and features incorporated into each applicable new and redevelopment project for the period beginning in the second quarter of Joint Effort implementation and through the eighth quarter of Joint Effort implementation. The Tracking Report will be complete by the end of the ninth quarter of Joint Effort implementation. (Q9)</p>	<p>Documentation/Tracking of all LID principles required and implemented.</p> <p>Tracking Report completion.</p>	1	2	3	4	5	

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years					Pollutants of Concern	
			The City will develop a measure that assures long term upkeep of hydromodification controls by the end of Q8	To ensure long term hydromodification control upkeep.			3				
<b>PCRC BMP 5.1.7</b> Long-Term Watershed Protection	The City will develop an approach to evaluate the effectiveness of watershed programs at meeting the goal of long-term watershed protection and a structure and schedule for modifying such programs as necessary following evaluation.	To reduce pollutants in stormwater and address hydromodification as well as ensure that there is long-range consideration of the watershed in the planning and implementation of projects.	Develop quantifiable measures that indicate how the City's watershed protection efforts achieve desired watershed conditions.  Evaluate the existing watershed protection efforts (the referenced land use policies, plans, ordinances, guidance manuals, and BMPs).  Adapt or change the existing efforts if necessary	Documentation of quantifiable measures.  Documentation of how well, based on quantifiable measures, watershed protection efforts achieve desired watershed conditions.  Documentation of modifications made to existing programs.					5		Bacteria, Heavy Metals, Pesticides, Sediments, Hydromodification
<b>PCRC BMP 5.1.8</b> Incentive Program for Innovative Site Design	An incentive program for innovative site design will be developed.	To incentivize and encourage LID and BMP implementation.	Showcase one innovative application of LID or BMP techniques per year on the City's website.  Advertise the incentive program widely at Development application counter and on website.	Number of innovative applications of LID/BMPs per year.  Number of innovative applications of LID/BMPs per year.			3	4	5		Sediments, Hydromodification
<b>PCRC BMP 5.1.9</b> Inspection Procedures and Enforcement	The City inspects all projects after construction to ensure that everything is built to plan according to conditions of approval.	To ensure implementation of stormwater management requirements related to site	Inspection of all projects requiring stormwater BMPs following construction to ensure compliance with standard conditions of approval and inspection of	Number of post-construction site inspections conducted relative immediately following construction and one year following	1	2	3	4	5		Sediments, Hydromodification

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation T timetable in Years				Pollutants of Concern	
	<p>If the Building Inspector finds that any portion of the plans or standard conditions of approval were not met, he/she will withhold the occupancy permit until such conditions are met. For projects requiring stormwater BMPs, the City will require that applicants/ owners/maintainers submit a brief report to the City exactly one year from the date of the issuance of the building permit describing BMP operation and any maintenance issues that have come up. In addition, City maintenance staff will inspect 20% of all projects requiring stormwater controls within the City one year after construction to ensure that all BMPs are being properly maintained. Due to the inclusion of stormwater management</p>	<p>design and BMP maintenance.</p>	<p>20% of projects approximately one year after construction to ensure required BMPs are being maintained.</p> <p>Application of enforcement measures in 100% of situations of non-compliance arising out of inspections; documentation of enforcement measures.</p>	<p>construction.</p> <p>Tracking of BMP implementation and enforcement measures taken to ensure compliance with standard conditions of approval in BMP database.</p>		2	3	4	5	

Table PCRC (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable in Years				Pollutants of Concern
					2	3	4	5	
PCRC BMP 5.1.10 Staff Training	Staff training to recognize potential stormwater impacts during design review and condition projects appropriately by the end of Year 2	To ensure proper implementation of post-construction stormwater controls.	Annual training shall be used to initiate new staff, and to provide updates on innovative site design for existing staff. Staff will be trained on City development review procedures, post-construction best management practices, and low impact site design measures. Staff will be trained to implement and enforce hydromodification control and LID criteria by the end of Q8.	Number of trainings organized and survey taken by all staff to assess understanding of content.	2	3	4	5	Sediments, Hydromodification

## **6.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

The Public Works Director of the City of Carpinteria will be responsible for implementing this SWMP element.

The purpose of the Pollution Prevention and Good Housekeeping BMPs are to ensure that the City's delivery of public services occurs in a way that stewards water quality and protects its beneficial uses. As the administrator of the SWMP, the City has to serve as a model to the community.

The goals of this section are provided to or eliminate adverse water quality impacts from construction, operations, and maintenance activities by municipal agencies. In BMP 6.1.8, the City commits to developing and implementing a schedule for maintenance of public streets, roads, and highways operations in Year 1 of the permit term. The parameters developed in this BMP will inform and influence other BMPs.

The General Permit states that the permittee, in this case the City, must develop and implement an operations and maintenance plan that will prevent or reduce pollutants in runoff from municipal operations. The minimum requirements for the Pollution Prevention and Good Housekeeping MCM are as follows:

- Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations that will occur in Year 1
- Using training materials that are available from various sources, including the LPA, the state, or other professional organizations, the program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. Training will occur annually.

The following BMPs are either currently being implemented or will be implemented by the City within the next 5 years of the permit term.

### **6.1 Best Management Practices**

The City engages in numerous activities ranging from minor janitorial services to major public works construction projects. To effectively cover all these activities, the SWMP requires the implementation of the following BMPs.

### 6.1.1 Site-Specific SWMPs

To ensure compliance with the City's stormwater management program, a site specific SWMP will be developed for all facilities and/or operations that could adversely impact stormwater. In order to address the need for stormwater protection, a multistep process will be used to document the nature of each City operation and/or facility and identify appropriate BMPs to minimize the potential for impacts to stormwater quality. Any new or acquired facilities will be evaluated with respect to operations, activities, and appropriate stormwater management practices.

This BMP will include the following measurable goals: The City will inventory all municipal facilities and/or operations and identify the relevant POCs for each; these facilities will be prioritized (within the second permit year) for individual SWMP development on the basis of which sites are most adversely impacting stormwater quality criteria for determination, which will include proximity to sensitive areas, size of facility/operation, and estimated amount of current POC discharge (as well as any other relevant baseline data). Individual SWMP checklists will be developed for 50% of the facilities in the third permit year addressing the highest priority facilities/operation first. The measurable goals will also include developing individual SWMP checklists for all facilities by the end of the first permit term; inspecting 100% of facilities that have individual SWMP checklists for compliance within 6 months of implementation, documenting results and if necessary revising/augmenting SWMP checklists; and conducting biennial review/inspection of sites and SWMP checklists and update as needed. Individual SWMP checklists will be evaluated for effectiveness one year after implementation.

The Effectiveness Measures for the above BMP include the following:

- Identifying POCs at each City facility/operation. The City facilities are as follows:
  - City Hall (parking lot), 5775 Carpinteria Avenue, Carpinteria, California 93013
  - Public Works (yard), 5775 Carpinteria Avenue, Carpinteria, California 93013
  - Veterans Building, 411 Walnut Avenue, Carpinteria, California 93013
  - Ash Street Boat House, 100 Ash Avenue, Carpinteria, California 93013
  - El Carro Park (restroom/parking), El Carro Lane, Carpinteria, California 93013
  - Monte Vista Park, Bailard Avenue, Carpinteria, California 93013
  - Heath Park, Eucalyptus Lane, Carpinteria, California 93013.

Potential pollutant sources at these facilities include parking lots, trash bins, picnic areas, maintenance facilities, and landscaping. Other City operations include Public Works projects such as pavement maintenance and capitol projects, as well as other general maintenance projects performed by both Public Works and Parks and Recreation. Prioritizing facilities and/or operations and documenting the number of facilities with individual SWMP checklists will take place in the second year of the permit term. It is the intent of the City to have 100% of the facilities equipped with SWMP checklists by the end of the first permit term. Sites with individual SWMP checklists will be inspected within 6 months of SWMP implementation, and

the number of sites inspected and SWMP checklists will be reviewed annually and updated as necessary.

### **6.1.2 Purchasing and Contracts**

The City will ensure that contractors required to implement BMPs or activate related stormwater plans to protect water quality are aware of regulations and enforcement mechanisms. The measurable goals for this BMP are as follows:

- The City will review and revise standard contract language to incorporate language that requires compliance with stormwater pollutions prevention BMPs.
- The City will develop enforcement language and mechanisms for non-compliance and ensure that contractors are aware of required BMPs and fines for non-compliance.
- The City will enforce all (100%) of contracts.
- The City will routinely (frequency of site visits will be dependent on length of project) inspect sites, at least twice during construction and audit to ensure compliance with BMPs.
- The City will review contract language annually to ensure conformance with most recent developments.

The effectiveness measures for this BMP are as follows:

- The review of all contracts and revision of language to be compliant with BMPs, and inform the contractor of the enforcement mechanisms and fines
- The number of contracts with mechanisms and enforcement provisions as well as the number of contracts violated
- Visitation and documentation of sites, as well as the documentation of number of BMPs implemented and/or need for enforcement/fines on the site
- The number of contracts reviewed as a factor of the number of contracts the City has; documentation of the number of contracts that need revision.

### **6.1.3 Integrated Pest Management**

The City of Carpinteria uses integrated pest management methods in the parks and street right-of-ways in order to prevent stormwater runoff quality degradation, as well as to improve public safety and cost effectiveness. These methods include the use of City-generated tree chip mulch to suppress weed growth and prevent soil siltation, the use of hand labor to remove weeds from park and right-of-way planter areas, and the minimal use of herbicides for weed control. When herbicides are used, they are applied with judicial compliance with manufacturers' recommendations for effective results.

The Park system uses mostly mulching and hand removal techniques but does occasionally use a minimal amount of glyphosate. Trade names for products containing glyphosate include Roundup, Rodeo, and Pondmaster. It is not applied to any turf or play areas. Glyphosate is highly absorbed on most soils, especially those with high-organic content. The compound is so strongly attracted to the soil that little is expected to leach from the applied area. Microbes are primarily responsible for the breakdown of the product. The time it takes for half of the product to break down ranges from 1 to 174 days. Because glyphosate is so tightly bound to the soil, little is transferred by rain or irrigation water. One estimate showed less than 2% of the applied chemical is lost to runoff. The herbicide could move when attached to soil particles in erosion runoff. Photodecomposition plays only a minor role in environmental breakdown. See the Cornell University website listed for more complete information:

<http://pmcep.cce.cornell.edu/profiles/extoxnet/dienochlor-glyphosate/glyphosate-ext.html>

In the City's athletic fields, those used for soccer for example, the City does occasionally use dicamba to control clover. The invasion of clover into turf grass can be reduced by using levels of nitrogen fertilizer that will promote grass growth but not the growth of clover; this can be achieved by applying 1 pound of active nitrogen per 1,000 square feet of turf grass during each month of active turf grass growth. Nitrogen applications are carefully calculated and applied to avoid runoff of excess fertilizer to drainage systems. Clover in established turf grass cannot be controlled by fertilization or mowing of the grass. Once clover is established, the annual clovers are controlled by hand-pulling before seeds are formed. Hand-pulling is repeated as new germination occurs and desirable turf grass is planted in weeded areas.

This BMP's measurable goals are that the City will reduce the use of pesticides on facilities maintained by the City by 10% annually. The City will also seek new and innovative ways to improve the effectiveness of integrated pest management by looking at other models. The Effectiveness Measures associated with this BMP are the percentage of fertilizers reduced and the documentation of the type and amount of pesticide used in each location, as well as the number and type of new strategies used over time and effectiveness of strategies by comparison to previous years.

#### **6.1.4 Street Sweeping**

The City's street sweeping maintenance program applies to two sections of town and both are contracted out to Venco Sweeping. These are comprised of the downtown commercial and beach area, and the residential area of the City. These areas are swept weekly. The objective of the street sweeping program is to prevent street pollutants (sediment, litter, leaves, paper, cans, etc.) from getting washed into the storm drain system or from building up in the public right-of-way.

The measurable goals of this BMP state the City will continue to implement street sweeping program; streets in the downtown commercial districts will be swept weekly; streets in residential areas will be swept weekly; parking lots will be swept monthly; and maintenance

schedules will be documented and the types of pollutants will be documented in each area to inform outreach efforts for education and training.

Effectiveness measures will be documenting the frequency of sweeping and number of miles swept weekly and the amount/weight of materials collected weekly or monthly depending on land use.

#### **6.1.5 Catch Basin and Continuous Deflective Separation Unit Cleaning**

The City cleans all catch basins annually. The City also maintains and cleans two continuous deflective separation (CDS) units on an annual basis as a means of ensuring clean, effective stormwater runoff and thereby preventing pollution into local water resources. Both CDS units (Sixth Street-Ash Street/Marsh Park) are inspected by the city annually before and after the winter season and are cleaned of debris (if necessary) by an industrial vacuum truck from a private contractor or the CSD. Both these units, if maintained properly, can provide another important element in the city's (BMP) SWMP.

The measurable goals of this BMP are that the City will continue to clean all catch basins annually and that the City will clean the two CDS units out for trash and gross solids once every year. An inspection schedule will be developed for all catch basins by the end of Year 1, and there will be an annual determination of effectiveness cleaning schedule/frequency.

The effectiveness measures associated with this BMP are the development of schedule by the end of Year 1 and comparison with previous years.

#### **6.1.6 Pet Waste Program**

As cited previously in the Section 3, Illicit Discharge Detection and Elimination, Title 6 of the City's municipal code addresses animals and the enforcement procedures associated with violations to the code.

##### ***TITLE 6. ANIMALS***

##### ***6.04.070 Animal control director – Power to arrest.***

*The animal control director and his or her agents shall have the power to arrest in connection with the enforcement of any of the provisions of this chapter.*

##### ***6.04.240 Dogs on public beach prohibited.***

*It is unlawful for any person to suffer or permit any dog owned, harbored, or controlled by him to be on the public beach between Linden Avenue and Ash Avenue whether leashed or unleashed.*

**6.04.490. Dogs creating nuisance by defecating in public parks, etc.**

*No person owning or having custody or control of any dog shall knowingly or through failure to exercise due care or control permit such dog to defecate and allow such to thereafter remain in any public park, school ground, or other public place, upon the sidewalk or parkway of any street, or upon any private property which is improved or occupied without the consent of the owner or person in lawful occupation thereof. A person shall not be considered in violation of this section if the person has necessary equipment, i.e., shovel, bag, etc., readily available and does take immediate and necessary action to accomplish removal of such nuisance.*

*(Ord. 313, 1981)*

**6.04.390 Equine, bovine, bovidae, suidae, leporidae, and fowl – Permit requirements – Special permit for 4H type projects.**

- A. The keeping or maintaining within the city of any livestock including any live horse, mule or other equine, cow or other bovine, sheep, goat or other bovidae, hog or other suidae, chicken or other fowl, rabbit or other leporidae shall be unlawful without a permit first having been obtained from the city manager or his authorized representative.*
- B. No live horse, mule or other equine, cow or other bovine, sheep, goat or other bovidae, hog or other suidae, chicken or other fowl, rabbit or other leporidae, or other livestock shall be kept in any building used for residential purposes, or in any part thereof, nor shall any such animal be kept or maintained in the city unless there is provided for that purpose a barn, stable, hutch, pen, house or building constructed according to law.*
- C. Equine, bovine, bovidae, or suidae shall be prohibited on any lot of ten thousand square feet or less. On lots greater than ten thousand square feet there shall be a limit of one per lot. No barn, stable, hutch, pen, house or building intended for equine, bovine, bovidae, or suidae shall be erected, constructed, established, altered or enlarged within three hundred feet of any residence, apartment, hotel, motel, school, church, hospital, public building, dwelling or other place of human habitation.*
- D. Fowl or leporidae shall not exceed one per one thousand square feet of lot area, or twenty-four total fowl or leporidae, whichever is the lesser. Fowl or leporidae may be stabled or hutched in a totally covered and enclosed area not less than twenty-five feet from any residence, apartment, hotel, motel, school, church, hospital, public building, dwelling or other place of human habitation. Roosters and peacocks are not permitted within the city.*
- E. The city manager or his authorized representative may issue a special permit allowing one sheep, goat or hog or other suidae that is less than one year old and is part of a controlled, educational animal husbandry project, such as those sponsored by 4H and FFA, to be stabled or hutched in an enclosed area not less than twenty-five feet from any residence, apartment, hotel, motel, school, church, hospital, public building, dwelling or other place of human habitation. This special permit shall not be granted for any horse, mule or other equine, cattle or other bovine.*

- F. A permit shall be applied for to the city manager or his authorized representative in writing and the city manager or his authorized representative shall thereupon cause an investigation to be made. If, after investigating the conditions and considering the facts presented, the following facts are found by the city manager or his authorized representative, a permit shall be issued to such applicant by the city manager or his authorized representative:*
- 1. That the keeping or maintaining of such animal or animals will not constitute a nuisance to the neighborhood;*
  - 2. That the keeping or maintaining of such animal or animals will not constitute a menace to public health;*
  - 3. That the keeping or maintaining of such animal or animals will not constitute an interference with the comfortable enjoyment of life or property;*
  - 4. That the keeping or maintaining of such animal or animals will not be a violation of any state or municipal law or ordinance;*
  - 5. That the keeping or maintaining of such animal or animals will not create a harborage or breeding grounds for insects or vermin.*
- G. If such facts are not found, such permit shall be refused. Permits issued pursuant to this section may be revoked by the city manager or his authorized representative at any time for cause, including, with limitation, failure to maintain the animals in accordance with subdivisions 1 through 5 of subsection F of this section.*

*(Ord. 327 § 1, 1982: Ord. 324 § 1, 1982: Ord. 279 § 1, 1979: prior code § 4431)*

The City will continue to provide pet waste bags at City parks for easy and convenient cleanup of pet waste. The measurable goals of this BMP are that City will provide pet waste bags at 100% of City parks by the end of the first year of the permit term. The City will refill pet waste dispensers as needed. Usage at each dispenser will be monitored and refill frequency modified to accommodate variable usage. Pet waste dispensers will include signage addressing the importance of proper disposal of pet waste and fines associated per ordinance. The City will enforce 100% of all violations using the methods described in BMP 3.1.3 and evaluate pet waste ordinance biennially.

The effectiveness measures for this BMP will be measured by the number of pet waste dispensers and their locations; the number of pet waste bag dispensers with signage and amount of pet waste found as compared to before signage; the number of violations and number of enforcements actions; and documentation of biennial review of ordinance.

#### **6.1.7 Staff and Contractor Training**

The measurable goals are that all contractors doing business in the City will have to attend or agree to attend at least one (1) training session sponsored by the City relevant to the work they

do for the City. Municipal staff (including but not limited to parks staff, fire staff, law enforcement staff, maintenance staff, etc.) will attend annual training on proper vehicle washing and maintenance, fleet and building maintenance, new construction and land disturbance activities, stormwater system maintenance, hydromodification, LID requirements, etc., and training sessions will be evaluated for effectiveness. The Effectiveness Measures for this BMP are as follows: the attendance at any of the various public and contractor related workshops held by the City throughout the year as described in numerous BMPs included in the SWMP that are related to the contractors work with the City; the number in attendance at specific trainings, as well as topic discussed and areas where there were the most questions, and conducting surveys/questionnaires/quizzes on topic discussed at training before and after the session; and the number of participants that receive high scores.

#### **6.1.8 Municipal Separate Storm Sewer System Maintenance Operations**

The City will develop and implement a schedule for maintenance of City facilities (including but not limited to roads, bridges, sidewalks, and building facades) to prevent pollutants from entering MS4s and identify procedures for proper waste removal within Year 1. The measurable goals for this BMP include inventorying and developing a schedule for routine maintenance and strategies for maintenance of particular facilities, as well as identifying a method for maintenance and waste removal protocol. The Effectiveness Measures of this BMP include the development of a schedule within the first year, the number of facilities maintained per year, and the documentation method for maintenance and waste removal protocol.

#### **6.1.9 Hazardous Spill Response**

This BMP will commit the City to updating the Hazardous Spill Response and Training to address potential discharges to MS4s. The measurable goals of this BMP are to conduct a refresher staff training (biennially) on hazardous materials and spill prevention, as well as control procedures and practices for stormwater pollution prevention requirements and development and implementation of a checklist for staff. The effectiveness measures for this BMP are the number of staff trained and the number of checklists utilized annually compared to documented spills.

### **6.2 Reporting**

Data collected for each measurable goal will be compiled, reviewed, and summarized as part of the annual reports to the RWQCB. Evaluation of the program will be measured by employing the Effectiveness Assessment Strategy. Significant variance regarding City employees, stakeholders, etc. will be used to modify BMPs or the measurable goals, as appropriate; the basis for any changes will be included in the following annual report.

**Table GH  
Pollution Prevention and Good Housekeeping Operations for Municipal Operations**

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable			Pollutants of Concern
<b>GH BMP 6.1.1</b> Municipal Facility and Operations' Individual SWMPs	Design and Implement Site Specific SWMP for all facilities and/or operations that could adversely impact stormwater and update biennially.	To reduce the amount and sources of stormwater pollution by increasing Stormwater Management BMPs and ensuring use in all areas of the City.	Inventory all municipal facilities/operations and identify POCs for each by the second year.	An inventory exists, so the City needs to identify POCs.	2			Sediment, oils, grease, metals, chemicals, pathogens, pesticides/fertilizers (nutrients)
			Prioritize facilities on the basis of which sites could most adversely impact stormwater quality based on POCs, proximity to sensitive areas, size of facility/operation and any baseline data.	List of priorities.	2			
			Group facilities and/or operations based on POC most critical to address and develop individual SWMPs for 100% of the most detrimental as far as impacts on stormwater within the second permit year.	Number of facilities with individual SWMPs in the second year.	2			
			Develop individual SWMP checklists for 100% of facilities by the end of the first permit term.	Number of sites with individual SWMP checklists by end of first permit term.	3	4	5	
			Inspect 100% of facilities that have individual SWMP checklists for compliance within 6 months of implementation, document results and if necessary revise/augment SWMP.	Number of sites inspected within 6 months of SWMP implementation.	3	4	5	

Table GH (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern	
					1	2	3	4	5		
			<p>Conduct annual review/inspection of sites and SWMP checklists and update as needed.</p> <p>Evaluate SWMP checklists for effectiveness one year after implementation.</p>	<p>Number of sites inspected and SWMPs reviewed annually and number of SWMPs updated.</p> <p>Percent reduction in discharge over situation prior to implementation of individual SWMPs.</p>			3	4	5		
GH BMP 6.1.2 Purchasing and Contract Regulation	The City will ensure that contractors required to implement BMPs or activate related Stormwater Plans to protect water quality are aware of regulations and enforcement mechanisms.	To reduce the amount and sources of stormwater pollution by increasing Stormwater Management BMPs and ensuring use in all areas of the City.	<p>The City will review and revise standard contract language to incorporate language that requires compliance with stormwater pollution prevention BMPs.</p>	<p>Review all contracts and revise language.</p>	1						Sediment, oils, grease, metals, chemicals, pathogens, pesticides/fertilizers (nutrients), litter, trash, LO
			<p>The City will develop and adopt enforcement language and mechanisms for non-compliance and ensure that contractors are aware of required BMPs and fines for non-compliance in year 1 of the permit term; The City will enforce all (100%) of contracts in years 2-5.</p>	<p>Number of contracts with mechanisms and enforcement provisions and number of contracts violated.</p>	1	2	3	4	5		
			<p>The City will routinely (dependent on length of project), but at least twice during construction inspect sites and audit to ensure compliance with BMPs.</p>	<p>Visit and document sites and document number of BMPs implemented and/or need for enforcement/fines.</p>	1	2	3	4	5		
			<p>The City will review contract language annually to ensure</p>	<p>Number of contracts reviewed as a factor of the</p>	1	2	3	4	5		

Table GH (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
			conformance with most recent developments	number of contracts the City has; documentation of the number of contracts that need revision.						
<b>GH BMP 6.1.3</b> Integrated Pest Management	Use Integrated Pest Management methods for maintenance of City facilities.	To reduce the amount and sources of stormwater pollution by increasing Stormwater Management BMPs and ensuring use in all areas and functions of the City.	The City will reduce the use of pesticides on facilities maintained by the City by 10% annually.  The City will seek new and innovative ways to improve the effectiveness of Integrated Pest Management by looking at other models.	Percentage reduced and documentation of the type and amount of pesticide used in each location.  Number and type of new strategies used over time and effectiveness of strategies by comparison to previous years.	2	3	4	5		Sediment, chemicals, pesticides/fertilizers (nutrients), LO
<b>GH BMP 6.1.4</b> Street Sweeping	The City will continue to implement street sweeping program.	To reduce the amount and sources of stormwater pollution by increasing Stormwater Management BMPs and ensuring use in all areas and functions of the City.	Streets in the downtown commercial districts will be swept weekly.  Residential areas will be swept weekly.  Parking lots will be swept monthly.  Maintenance schedules will be documented and types of pollutants will be documented.	Frequency of sweeping and number of miles swept as well as type and amount of trash and location.  Amount/weight of materials collected weekly or monthly depending on land use.	1	2	3	4	5	Sediments, Debris, Trash
<b>GH BMP 6.1.5</b> Catch Basin and CDS Unit	The City will continue to clean all catch basins annually.	To reduce the amount and sources of stormwater	An inspection schedule will be developed for all catch basins by the end of Year 1.	Development of schedule.	1					Sediments, Debris, Trash, Heavy Metals

Table GH (Continued)

BMP #	BMP	BMP Intent	Measurable Goals	Effectiveness Measure	Implementation Timetable					Pollutants of Concern
	The City will clean the two CDS units out for trash and gross solids once every year.		Catch basins and CDS units will be cleaned annually and debris amounts will be measured and documented	Number of catch basins and CDS units cleaned; amount of debris collected	1	2	3	4	5	
			Annually determination of effectiveness cleaning schedule/frequency.	Comparison with previous years	1	2	3	4	5	
<b>GH BMP 6.1.6</b> Pet Waste Program	The City will continue to provide pet waste bags to reduce the animal waste in the parks	To reduce the amount and sources of stormwater pollution by increasing Stormwater Management BMPs and ensuring use in all areas and functions of the City	Pet waste bag dispensers will be checked routinely and refilled as needed	Number of pet waste bag dispensers refilled locations as well as number of pet waste bags used; amount of pet waste removed from parks/sidewalks/trails	1	2	3	4	5	Bacteria, Total Coliform, pet waste, horse waste
			Pet waste wag dispensers will include signage addressing the importance of proper disposal of pct waste and fines associated per ordinance	Number of pet waste dispensers with signage and amount of pet waste found at location as compared to before signage	1	2	3	4	5	
			The City will enforce 100% of all violations using the methods described in BMP 3.1.3	Number of violations and number of enforcements actions	1	2	3	4	5	
			Evaluate pet waste ordinance biennially	Document biennial review of ordinance	1		3		5	

